



3 1761 04771827 5

RATURE PRIMERS

by JOHN RICHARD GREEN

PHILOLOGY

J. PEILE M.A.

P

121

P4

1877

c. 1

ROBA





Presented to the Library
OF THE
University of Toronto.
~~BY~~

from
the Estate of the late
James Brecher, LL.D.

Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation



Literature Primers.

Edited by JOHN RICHARD GREEN.

PHILOLOGY.

BY

JOHN PEILE, M.A.

13 | 2 | 88.

THIRD EDITION.

291288 / 33
15 9

London:

MACMILLAN AND CO.

1877.

CONTENTS.

CHAPTER I.

THE CONSTANT CHANGE IN LANGUAGE	5
-------------------------------------------	---

CHAPTER II.

SOME OF THE WAYS IN WHICH LANGUAGES HAVE BEEN FORMED	43
-------------------------------------------------------------------	----

CHAPTER III.

THE PRINCIPAL LANGUAGES OF THE AMALGAMATING TYPE	54
---------------------------------------------------------------	----

CHAPTER IV.

HOW OUR WORDS WERE MADE	68
-----------------------------------	----

CHAPTER V.

HOW WORDS ARE GOT READY FOR USE	80
-------------------------------------------	----

CHAPTER VI.

THE PARTS OF SPEECH	114
-------------------------------	-----

CHAPTER VII.

THE BEGINNINGS OF SYNTAX	124
------------------------------------	-----

CHAPTER VIII.

ON THE NATURE OF LANGUAGE	132
-------------------------------------	-----

APPENDIX	162
--------------------	-----

PRIMER

OF

PHILOLOGY.

CHAPTER I.

THE CONSTANT CHANGE IN LANGUAGE.

I. What is Philology ?

It is the science which teaches us what language is. The philologist deals with the words which make up a language, not merely to learn their meaning, but to find out their history. He pulls them to pieces, just as a botanist dissects flowers, in order that he may discover the parts of which each word is composed and the relation of those parts to each other: then he takes another and yet another language and deals with each in the same way: then by comparing the results he ascertains what is common to these different languages and what is peculiar to one or more: lastly, he tries to find out what the causes are which operate on all these languages, in order that he may understand that unceasing change and development which we may call, figuratively, the life of language.

2. But you will say perhaps, '**What is the good of all this?**' When I learn a language, I learn it in order to speak it or to read it; I don't want to know

how the words are made up, I only want to know what they mean.' It is quite true that you need not learn anything more. For example, if you are learning French, you must learn that *mais* means 'but;' it is not necessary for you to know that *mais* is only a shorter form of the Latin *magis*; you have simply to remember that it is now a conjunction. But it may interest you to know that it was once a comparative adjective, and meant 'more;' and that some people, when they wished to say 'don't be in a hurry, but listen,' struck out the idea of expressing the second clause by saying 'more listen,' that is, 'listen rather than not.' *But* has quite a different history; it meant 'be out,' that is, 'except;' so the English and the French got to the same meaning by very different roads. Now, as I have said, it is nowise necessary for you to know things like these: you can say what you have to say and understand what you hear quite well without this knowledge. But words are things after all, as well as being the names of things; and they often are very powerful things too, as we may see by and by. And, if you are one of those who like to know why things are what they are, you will be glad to find out that words are not merely so much breath which is spent in setting out our meaning to each other and has no further permanence; that, on the contrary, they are abiding things, the history of whose origin, growth, decay, and vanishing, is much more interesting than many a novel; which even in many a curious way throws light on some dark processes of the human mind.

3. But, you will ask, '**Can words be subject to this incessant change?**' Substantives, for example, are the names of things actually existing, or of qualities of those things. When I say an oak, I mean an oak and not a beech; goodness is not badness; and if these things don't change, how can the names which express them change without causing utter confusion?

Perhaps variations so violent as these are not very common, and yet both these changes have occurred in language. The very same word which to the Greeks meant an oak, to the Romans meant a beech, though an oak never yet changed into a beech. *Schlecht* in German first of all meant 'straight.' Now the 'straightness' of a visible object, such as a line, is the most obvious metaphor by which to express the moral idea of 'straightforwardness' and simplicity of heart and purpose, just as our common word *right* means originally that which is straight, the Latin *rectus*. But then simpleness may shade into the folly of the simpleton; and lastly the fool in worldly wisdom may give his name to the fool of whom Solomon spoke; and by some such process as this *schlecht* in modern German means 'bad' only. After seeing this change of nouns, can we wonder that verbs can vary their meaning by imperceptible degrees so much that the first sense would be altogether unrecognisable unless we had the history of the word recorded by its use in successive writers?

4. Great changes of language are sometimes due to great convulsions in history; as when the Roman civilisation was destroyed by nations comparatively uncivilised and the language of the Romans remained modified in different ways in the countries of which they were the lords no longer. Such great changes do not often take place; yet just as surely, though more slowly, a gradual change goes on in the most peaceful times, of which you cannot have a better example than in your own English. 'Well,' you say, 'surely English has not changed much in the last three hundred years. We can read Shakespeare without any difficulty.' That is saying a little too much; we are so familiar with the best parts of Shakespeare that perhaps we are hardly conscious of the difference; the words have a well-known sound, and if we are not students of

language we may not examine them very carefully. But open your Shakespeare almost at random and you will soon find out, if you really consider, how much is now obsolete, how many words have passed out of use or are used in a different sense. I have opened on *Macbeth*, Act i. Sc. 7, and there I find in Lady Macbeth's speech :—

“ His two chamberlains
Will I with wine and wassail so convince
That memory, the warder of the brain,
Shall be a fume, and the receipt of reason
A limbec only.”

The general sense is very plain, but then the general sense can often be picked up out of the context without our seeing the exact meaning of each word.

5. Now look at a few of the words here. (1) ‘Chamberlain,’ as we know, is etymologically a man of the chamber; it comes from camera, a chamber, originally a vault; the root of this is cam = to be bent or crooked, which is supposed to be the origin of the name of our most crooked river. The old sense of ‘chamberlain’ has not quite died out of our recollection; yet when we speak of the Lord Chamberlain—the only person to whom the title is now applied—we don’t think of a man whose business it is to guard his king’s sleep when on a journey, or, generally, of a bedroom attendant, but of one whose best known duty is the censorship of plays. (2) ‘Wassail’ is a word which we should expect to find in a historical novel, but not to hear in every-day talk. We feel pretty sure that it has something to do with good cheer, but we may not know that it was originally a drinking of health; that was was the imperative of the verb was, ‘to be,’ which we have turned into an auxiliary verb to mark past time; and the last syllable is our word hale = healthy, which we have pretty well restricted to the description of an

elderly man, whom we call 'hale for his years ;' though we are familiar with the word in the corrupted form whole, which we have in the Bible, 'I have made a man every whit whole on the Sabbath-day ;' and the corresponding Greek word, as you may see by Grimm's Law (see Appendix I.), is kalos. (3) **Convince** has wavered much in sense ; we use it now simply for persuading a person, but the primary meaning was 'to overpower,' which it has here ; in the Bible phrase 'Which of you convinceth me of sin?' we have the same special sense of overcoming by testimony, which *convincere* had in Latin.

6. So again (4) **Warder**, like 'wassail' is a word with which we are familiar from books, but which we should not ourselves use without the appearance of affectation : we should use the equivalent 'guard.' We have here a couple of words identical in meaning, just as we have wise and guise, warrant and guarantee, wager and gage, and others which explain the riddle, such as war and French guerre, warren and French garenne. It is well known that in all these the w marks the Teutonic word introduced alike into England by the Anglo-Saxons and into France by the Franks, which the earlier inhabitants of France were unable to pronounce without letting a g escape before it ; and so they produced the second form beginning with gu. Some of these second forms were brought into England by the Normans, and existed there by the side of the English word brought long before ; but as there was no distinction in sense, one form generally fell into disuse, only to be revived for a special purpose, as by Sir Walter Scott to give a mediæval look to his poems. (5) **Fume** meant smoke or steam. Shakespeare used it metaphorically, just as we might speak of a man's reason being clouded. Such a use of the word may have been familiar at his time, but no such idea would now attach to it ; if we use it at all, we do so in the old simple sense, as

the 'fumes of tobacco,' the same sense which the word bore at Rome and in far-away India more than twenty centuries ago ; while the Greeks turned it, by a different metaphor, to express the steam of passion, and Plato in his famous analysis distinguished the 'thumoeides,' the spirited part of the soul, from that part which reasons, and from that part which desires.

(6) **Receipt** seems to be used of a place, that place where reason is found, just as we hear of Matthew in the Bible 'sitting at the receipt of custom.' (7) **Limbec** has probably died out altogether. It is only the student of the history of the English language who can guess that the word is equivalent to *alembic*, which meant a still or retort, and so is used here by Shakespeare merely in the sense of an empty vessel, that into which anything may be poured. The word is Arabic; it was brought into England with chemical study like *alchemy* itself, *algebra*, and many others. Then by degrees people fancied that the *a* at the beginning of the word was our article, though really the first syllable *al* is the Arabic article : and thus *lembic* or *limbic* was left. The article has often been a thief in England. It has two forms *an* and *a*, and meant *one*, as you may see in the old Scotch form, 'ane high and mighty lord.' The shortened form *a* was naturally used before a consonant, but when the word began with *n*, people did not always see where to divide rightly. Thus *a nadder* turned into *an adder*, *a napron* has become *an apron*, &c. ; on the other hand the *eft* (*ewt*) seems to have robbed the article in its turn and become *a newt*.

7. Thus we have examined one passage, and have found in its four lines seven words which are either not used now at all or are used in a different sense. Yet, as we said, the passage as a whole sounds simple enough when we read it or hear it on the stage. We must admit then that the English of to-day differs much from Shakespeare's English in the

meaning of its words. The main reason why the change does not strike us at once is that the verbs and nouns have no more inflections than they have in our every-day language.

8. Take another passage, and this time of an author but little older than Shakespeare—Gawin Douglas, who died in 1522, and who, as Sir Walter Scott tells us, was

“ More pleased that in a barbarous age
He gave rude Scotland Virgil’s page,
Than that beneath his rule he held
The bishopric of fair Dunkeld.”

The lines, which are part of the prologue to the twelfth book of the translation of the *Æneid* run as follows :—

“ In lissouris and on leys litill lammys
Full tait and tryg socht bletand to thar dammys,
Tydy ky lowys, veilys by thame rynnys,
All snog and slekit worth thir bestis skynnys.”

9. But this is not English at all, you say. Indeed it is, quite as good as Shakespeare’s : though its lineal descendant is now no longer called English—Northern English as it really is—but Scotch ; which ought to be the name of some Keltic language. It is true that some French words have crept in, because of the close political and social connection between Scotland and France : but they can be recognised, though very queer they look. Thus a little farther on we have *pastans*, which is nothing but *passe-temps*, our *pastime*. The very common Scotch, *to fash* is nothing but *fâcher* : *fashious* is *fâcheux*. In this passage, *veilys* is French. It is nothing but a *calf*, the old French *vêel* (*vitellus* in Latin) modernised into *veau*. Now let us try, very quickly, what we can make out of the lines. First we see that plural nouns still have, as a rule, an additional syllable : and this is spelt *-is*, or *-ys*, not *-es*, or *-s*, as it would have been farther south : thus we

have *lammys*, *dammys*, *veilys*, *bestis*, *skynnys*. But there is another plural form here—*ky*; this we know is still used in the north as the plural of ‘cow’ (*cu* in Old English, and the Northerners still keep the old sound). Then these plurals *ky* and *veilys* hint to us that *lowys* and *rynnys* must be plural verbs—not singular, as they look: and so they are: this was the regular form for the plural in the north, as *eth* was in the south, and *en* in the midlands. Then there is the ensnaring verb *worth*; which is a form of the A.-S. *weorthan*, the same in meaning as the German *werden*. It is present and has no suffix. It is the same word (though how few of us guess it!) as Sir Walter Scott could use in the *Lady of the Lake*.

“Woe *worth* (*i.e.* is) the chase, woe *worth* the day,
That cost thy life, my gallant gray.”

10. Then we have the present participle *bletand*, with the northern termination *and*; instead of *end* (midland) and *inde* (south). Note lastly the Scotch nominative plural *thir*, quite unlike the southern ‘those;’ but it has cousins in Iceland. These are all the grammatical points which strike us in these lines: but even the knowledge of these, though it may enable every one to guess the general meaning, will not explain all the words. *Lissouris* is a doubtful form; we have *leasowes* as a name for a pasture in some parts of England: and this points to Anglo-Saxon *læsu*; but the *r* is strange in our word; it may have been euphonic (see § 36). Then what are *tayt* and *tryg*? We shall not be able to explain them by the Anglo-Saxon. But if we look at Icelandic we shall find *teit-r* (where *r* is the sign of the nominative, the same as *s* in many languages) meaning ‘glad;’ and it is also a proper name in Iceland, so that we feel little doubt that our name ‘Tait’ has descended in England from a Norse pirate to the present Archbishop of Canterbury. *Tryg* also is to be explained from the same source. In

Gothic indeed *triggws* occurs and means 'true' or 'faithful,' but this does not quite suit the sense here; it is the Danish *tryg* and Icelandic *tryggr* which have the secondary meaning, 'unconcerned,' 'secure,' which explains this use of the word. No one will wonder that Norse words or forms (like *thir*) should be found on the south-east coast of Scotland. *Tydy* seems to be our own word, which is an adjective formed from *tide* = 'time' or 'season;' so that the natural meaning is 'seasonable,' here 'in good condition.'

11. After this explanation of all the difficulties, I hope that you can translate this old English into the speech of our own day. If you cannot, here it is in flat prose—

"In pastures and on meadows little lambs
Full gladsome and free from care sought bleating to their dams,
Kine in good condition low, calves run by them,
All smooth and sleek are those beasts' skins."

The original is full of poetry, but, if you want to feel that, you must know how to scan it.

12. These passages have shown us three things in our own language; (1) change constantly going on in the meaning of words: (2) the loss of inflexions in which our speech was once as rich as any: (3) the fact has dawned that there are different kinds of English speech within our four seas. This last result may seem strange to you. You may say: 'I grant that English has changed with the lapse of time, yet at one and the same time, there is but one English language in England: common people may use vulgar words or may pronounce them in a vulgar way, but there is only one correct kind of English.' But there is a confusion here. By 'vulgar' you mean 'unrefined,' that which is proper to uneducated people who don't read, and therefore do not speak that particular form of English which is now found in books; you may call it literary English. Now

these uneducated people are in the main the labouring classes who live in the country : though in the great towns of the North there are plenty of these 'vulgar' words which their speakers have inherited from their fathers who lived in the country, and which they transmit to their children ; these however will undoubtedly die out in the town sooner than in rural districts. Now the country folk certainly did not make these words themselves ; there is nothing that they are less likely to do. We therefore guess (and history proves) that these words which they use, and the sounds with which they pronounce them, are remnants of the form of English originally spoken in that province, and not merely spoken, but written in books which are of the greatest literary importance : these we may therefore call fairly enough 'provincial,' but not 'vulgar,' except in the sense that they form the 'vulgar tongue' of the 'common' people. The connexion between them and vulgarity is accidental. These provincial dialects were once literary dialects ; they doubtless were, and still may be, spoken with as much refinement as our present literary English : and the Northern English, which we call Scotch, is so spoken ; no doubt because Scotland has long had a higher average of education than England. On the other hand, literary English may be pronounced with just as much vulgarity as any other dialect ; as when we run two syllables into one, or slur the ends of our words.

13. So we must learn to recognise **different forms of English even in our own day.** It is quite true that the area of each of these forms is diminishing, while that of modern literary English is ever increasing. This has been so ever since printing began ; by which the forms of words of one particular dialect were stereotyped, so to speak, and preserved to a great degree from further change : but it is due still more to wider education : it is, of course, literary English which

is taught at school ; and this by degrees drives out the provincial English which is spoken at home ; and due perhaps most of all to the railroad which levels all local peculiarities. But the comparatively few forms which still remain in ordinary use are as valuable to the philologist as a rare flower just about to become extinct is to the botanist : they connect the present with the past and enable him to realise the exuberant life which has passed away. Compared with living forms of speech in daily use, the words of old dialects, as recorded in literature only, are like the dried specimens of a botanical museum.

14. It is worth our while to look a little more closely into these varieties of our own language. They will show us in a small compass the operation of all or nearly all those principles of change which regulate the development of all language. The words are for the most part familiar to us ; and inferences drawn from familiar facts are more immediately intelligible than if we have to explain the facts themselves. But this very familiarity is a danger against which it is just as well to give a caution. Because an Englishman 'knows' his own language, he may think that he knows the history of any and every word in it, without any previous study of it. He might just as well think that, because he knows the use of opium, he therefore knows, without reading, the whole history of the drug, how and where it was grown, and how it was brought to England. I once read somewhere a burlesque on literary soirées, and therein on fashionable etymology. The question was the meaning of the Greek name of Greece, *Hellas*. One lady derived it at once from the lovely Helen : another said that the name was a classical ejaculation of sorrow in all ages. A prosaic major who had served in the country said that these derivations were rather fanciful ; the name was really 'Hill-as,' because you couldn't go a mile without coming to a hill. The parable may show that we may be just as foolish, and

in what way ; namely, when we etymologise as if each man were a standard to himself, and ignore the laws of philology which painful students have discovered. In any language—our own or that of others—until we know the history of a word, and till we know the variations of sound which distinguish that language from other languages, every explanation we give of the word is a guess, and much more likely to be a wrong guess than a right one.

15. **Many old grammatical forms still survive in England**, and can be explained from our older literature, or from that of kindred peoples. A few remain in our literary English ; in which they naturally look ‘exceptions,’ and we are tempted in learning grammar to wish that they had gone altogether. Thus we regularly form our plurals by adding *es* or *s*, *foxes*, *books*, &c. ; but then we make ‘ox,’ *ox-en* ; and this is our only plural in *-en* in regular use ; for *cyne* (eyes), *shoon* and *hosen* are no longer used by writers of books, although they are used in all English dialects and many other forms of the same sort are to be heard everywhere south of the Humber. Thus in Dorsetshire you will hear of *cheesen* and *housen*, in Cambridgeshire of *housen* and *shippen* (i.e. sheep). In the North you will find (besides the regular *-s*) such a plural as *child-er* (Anglo-Saxon ‘*cild-r-u*’) ; and you may note that in ordinary English we have added on to the word a second plural suffix (apparently because the form in *r* was so strange that it did not suffice), and say *child-r-en* ; *kine* is another double plural, for, as we saw before, the simple form was *ky* ; in Cambridgeshire there is a similar form *mis-en* (pronounced ‘meezen’) instead of *mice*. Then how are plurals like *mice*, *feet*, *men*, to be accounted for ? In these the plural seems to be formed by change of the vowel. Well, if we knew nothing of the older forms of our language, these different plurals (which are, in all, but few compared with those in *s*) would seem to

us mere accidents; they would puzzle us, as exceptions from the ordinary rule, and we should perhaps regard them in the end as curious mistakes which had somehow become current, perhaps like the 'vulgar' forms mentioned above.

16. But the explanation is plain when we look at the different forms of our older literature—the southern English which was the 'literary' dialect in the days of Alfred, or the midland English which became supreme before the end of the fourteenth century mainly through the influence of Chaucer, or the northern English form of the first English speech of which we have written record, the writings of Bede and of Cædmon, and of which we have already seen something. These forms, so rare with us now, were regular then. Just as the plural of *A.-S. cild* (*child*) was *cildru*, so the plural of *cealf* (*calf*) was *cealfru*, and the plural of *æg* (*egg*) was *æggu*; and if we may for a moment go beyond our own speech, Icelandic plurals mostly contain an *r* and end in *-ar*, *-ir*, or *-ur*. Then as regards the plural in *en*, we shall find in Anglo-Saxon that all the nouns of the simplest class formed their plural in *-an*, later *-en*: but very soon in southern English the forms in *-es* began to supersede those in *en*, and later they were used indiscriminately, but with the *s*-form always gaining ground. The reason for this is not far to seek: the Norman-French plurals were formed in *s*, not in *n*: therefore when English came to be spoken by Normans they naturally formed plurals on their own principle, and as the English themselves used the *s*-form at least as often as the *n*, the chance against *n* being used was at least three to one.

17. Lastly, the plurals formed by change of the vowel of the noun, such as 'foot,' 'feet,' can be partly explained by Anglo-Saxon, and still more by the kindred languages of the Continent, especially the Old Saxon. In Anglo-Saxon the plural is *fēt*, where

the original vowel (*fôt*) has been changed as much as in English. But in Old Saxon the plural is *fôti*, and in Gothic words of the same form we find the traces of the fuller suffix *-is*. Now this final syllable explains the change of the vowel in the original syllable. It is a well-known phenomenon in language (of which we shall see more hereafter) that one sound affects another in pronunciation; that, for example, if two consonants meet, which differ in some principle of their formation, and therefore are not easily pronounced together, one generally modifies the other; thus the plural of 'fowl' (fowl + s) is really pronounced 'fowlz,' because *l* is a soft letter and *s* a hard one (see Ch. VIII. 16 for the meaning of these terms), and the *l* changes it into the soft *z*. Similarly a consonant can affect a vowel, and one vowel can affect another, though not generally in the same syllable; sometimes a vowel changes that of the following syllable, as when Latin *facilis* becomes *difficilis*; more commonly the vowel of the preceding syllable is brought nearer to—not made identical with—that which follows. These plurals are examples of such a change. Thus in '*fôti*' we have the two vowels *o* and *i* (*ee*-sound); for *o* the back of the tongue is raised much higher than for *i* (see Ch. VIII., 25); *e* (sounded as in French *fête*) comes nearer to *i* in this respect; also the mouth is 'rounded' for *o*, that is, the lips form a circular hole, the extremities being brought nearer; but the lips are not moved in sounding either *e* or *i*; therefore a speaker mindful of the coming *i*, and wishing half-unconsciously to spare his labour, so modified the preceding syllable that he sounded *ê* instead of *ô* and said '*fêti*.' Just so he said '*menni*' instead of '*manni*' for the plural of 'man.' Then in process of time the termination *i*, like so many others, was dropped and '*feet*,' '*men*,' &c., alone were left. Yet, none the less, the lost vowel had been the cause of the change. This we

should certainly never have known except by tracing the history of the vowel and by comparison with kindred languages, where the same change takes place. If we had guessed from the forms as we have them in use, we should probably have said that men made the change in order to mark the plural, which guess would have been quite wrong. But the lesson which I want you to draw from these plurals is this: that they were all regular in the parts of the country where they were used, not (as they now look) exceptions from some one proper form; and, generally, that diversity of form to denote the same idea is the rule, not the exception, in our language, and may be in others.

18. You may see one more example in **the conjugation of the verb**. We have lost all our plural inflections, so that we say *we bear, ye bear, they bear*. But this was not so six centuries ago. There were then regular inflections, but different ones in different parts of England. We have seen already that in Scotland the plural verb ended in *ys*, as *lowys, berys*; in the rest of the north of England the form was spelt with *-es, beres*; in the midland the form was *beren*, in the south *bereth*; and these forms are regularly found in the literature of these parts. They have passed away now, more than the noun-inflections; yet at the present day you may hear in South Lancashire, Cheshire, and Shropshire, forms like *they think-en*, and in Cumberland and Lancashire you will regularly hear *is* with a plural nominative, which strangers unwisely suppose to be bad grammar. Now these three forms are all capable of being traced back to a common origin; this was the same which you remember in Latin *sunt, regunt*, &c.; the Gothic form (*nd*) is seen in *rinnand* = they run. But this *-nt* was an inconveniently long sound at the end of a word, so it was shortened in different ways: (1) by dropping the *t* or *d*, which leaves us the old midland form in *n*, and

the modern Dutch and German forms; (2) by dropping the *n* and changing the *t* into *dh*, which gives the Anglo-Saxon *dh*, 'nimað' (they take), whence the southern English form which is also found in old Frisian; (3) by further changing the *t*, *d*, *dh* into *s*, whence the northern form. The Norse dropped the final consonant altogether, so that in any part of England where they settled their influence would tend towards its loss. Now, if all the inflections had varied in form as much as this one did in our single island, we should rather have had to speak of different languages than different dialects in England. But the change was not always so great, and the general loss of the suffixes, due to Norman and Norse influence, has brought the dialects closer together again. But they did exist, and traces of them exist to the present day.

19. I need not dwell—for you can do it easily for yourselves—on the differences in different parts of England of the names of things. What would a Northerner make out of a 'cutty' or a 'kime'—the Sussex names for a wren and a weasel? A South Saxon might be just as puzzled with the Northern 'brock' for a badger, or 'cleg' for a horse-fly. This latter word is Norwegian also—and was certainly introduced into West Cumberland and Lonsdale by the Norwegians who settled there in the tenth century. A bittern (the name seems to come from the old French 'butor,' with an *n* added in England) is called a 'bump' in Lonsdale, and this is the old Keltic name; in Cumberland the two names are run together and the bird is a 'bitter-bump,' and in Lincolnshire, if we may trust Mr. Tennyson's 'Northern Farmer,' it has become mysterious as a 'butter-bump.' The 'hernshaw' (which seems to have been the origin of the 'handsaw' from which Hamlet knew a hawk), the 'heronsew' of Cumberland and the 'herringsue' of Whitby, are nothing but the French 'heronceau,' in

Chaucer 'heronsewe.' How many different elements have we here in a few words? Keltic, Saxon, Scandinavian (Danish or Norwegian), French. Look at the rarer instance of **verbs found only in some parts** of England, which are plainly not of English origin, because they cannot be explained from Anglo-Saxon, nor yet from any allied German speech, as the French 'fash' in Scotland; in Scotland also the Norse 'gar' (to make or cause), found only in Scandinavian languages; the Cumberland 'oss' (to take a thing in hand), which can be plausibly connected with no language but the original Keltic.

20. Think next of the difference of pronunciation of the same name in those parts of England where English has been spoken by a race more or less alien in descent; and in how few parts of our land has this not happened? Thus in Scotland, in the English-speaking counties which border on the land where Gaelic is still the popular language, we find *th* dropped in the commonest words, so that 'that' is sounded as 'at;' and in some parts *hw* (= *wh* in 'what,' &c.) is superseded by *f*. Now both of these are Gaelic peculiarities. The Gaelic language is slowly but steadily retreating before the English, and whenever the Gaels ceased to speak their own language and spoke English instead, they naturally kept their habits of pronunciation and said 'fat' for 'what.' Better known than this are the variations of *c* (*k*-sound). Before the Norman conquest *k* was the sound heard, but under Norman influence it became the palatal *ch*. As we saw above, 'cild' became 'child;' and it has often been pointed out how the Roman 'castrum,' A.S. 'ceaster,' became 'chester' in the greater part of England; but in the provinces where English was pronounced by the Danes who had settled there and by their descendants, the original sound, which the Danes themselves had not changed, was kept, as in the Lincolnshire 'Caistor,' and Yorkshire 'Tad-caster.' So full

many a word varied in northern and southern mouths : 'kirk' of the north became 'church' in the south ; a 'churl' in the south was a 'carl' in the north. In the south-west of England there are more words which have suffered this change, *e.g.* 'black' is called 'blatch.' The old southern dialect showed a clear preference for soft over hard sounds, as *v* rather than *f*, *z* rather than *s* ; and this still remains in the south-western counties, as in 'vour' for 'four,' 'zecret' for 'secret.' But in Kent and Sussex this habit was checked, why, we cannot tell ; almost the only instance of the change now heard in Kent is 'vat' for the old form, still preserved in the Biblical 'wine-fat ;' and this change has been made everywhere. The French cannot sound our English *w*, and probably French influence is to be seen in the change to *v*, and also in the dropping of the initial *h* in the Cockney 'vot' = what ('hwat,' as it was formerly written, and is still sounded). The *h*-sound in such words is now most clearly heard from those who live in parts of England where Norse influence has been predominant. Many more examples might be given of these variations of consonants. The vowel changes, such as the passage of *a* (retained in the North) into *o* ('hame' into 'home,' &c.), are too minute and complex to be described here. So also are the variations both in the pitch of the voice and in the emphasis laid on particular syllables, which do more than anything else to specialize the pronunciation of different parts of England, notably in the south and east.

21. In our very brief account of some of the changes which have taken place in our own language, and are still taking place in a less degree, one very important point has come to light. It is this, some of the changes can be explained ; they are not accidental ; there is a reason for them ; and we therefore expect that there are reasons for the other changes which are yet obscure or

unexplained; and so we adopt provisional hypotheses to account for these latter changes—hypotheses which we must surrender if a fuller knowledge shows that they are untenable. In a word, we believe that there are certain permanent principles regulating the changes in our language, which, in the derived scientific sense of the word, we call laws; and if we find that these principles act in other languages as well as our own, we say that these laws, or some of them, are universal in their application; and this is the justification of our claim that there is a Science of Language. It is quite true that in some departments of the science the principles are difficult, if not impossible, to ascertain; thus the changes of the meanings of words are due to various and often very subtle mental associations; and therefore the laws which govern them must also be so numerous and so complicated in their action, that it is often impossible to say which is at work in a particular case. Yet even here something can be done. We can trace historically the changes of meaning in many different words, and see what the changes have in common. For instance, we can see how words which have a general meaning come to be restricted to one special sense; as in our own language ‘artist,’ ‘undertaker,’ ‘harbour,’ ‘hustings,’ &c. You may trace principles of change, such as this, in many languages. But for this we have not now time: and so I pass on to consider the simple principles which regulate the changes of the form and of the sound.

22. Let me begin with a caution. We have seen words constantly undergoing change of form. This change, we found, was checked when one particular dialect of a language is adopted for literary purposes; and it has often been pointed out how much the English translation of the Bible has done for the permanence of the dialect of English then used by educated men; how little the change of form

has since been. But this is true of the *form* only; it is not true of the *sounds* of the words written in the Bible. They have changed so greatly that it is not too much to say that the Bible as read now by you and me, would be barely intelligible to its translators. Here, then, the form of the word has in each case been fixed by printing; but the great principle of incessant change has been operating all the while on the sounds of the language, and will continue to operate as long as English is a spoken language. This is the reason of the so-called 'arbitrary' character of English spelling. The sounds do not now correspond regularly to their symbols, the letters of the alphabet. But they did correspond at the time when printing came in; not perhaps entirely, for it is probable that our fathers, like ourselves, had more vowel-sounds than the vowel-symbols which they had to express them; but at least they corresponded very much more than they do now. Bear in mind, then, that the same symbol does not always represent the same sound; and that the changes of the form are not necessarily any measure of the change in the sound of a word. When we are examining the history of dead languages we have only the form to work upon; we cannot tell how it sounded when spoken; and we are therefore obliged to assume that the form and sound regularly corresponded; that *a*, for example, was always sounded as we sound it in 'father,' and had not also the further sounds which it has in 'fate' or 'fat.' It is to be hoped that we are right in our assumption. In any case the possible varieties in the sounds of the consonants are but slight; the vowels are more likely to vary.

23. Now what has the general direction of consonantal change been in England? We have seen consonants dropped off at the end of words—*s* and *n* from nouns—*s* and *th* from verbs; and we have good reason for believing that this was greatly

due to the language being learnt and spoken by the Normans when they were coalescing with the English. What is the obvious explanation? Clearly that the Normans had no mind to trouble themselves with learning English grammar; and that the breaking down of the English inflections was the readiest way to mutual intelligibility. We have seen phenomena of the same sort where the Danes were established—not quite the same changes, but the same result; Norman and Dane alike got something which gave them less trouble. But, quite apart from these foreign influences, we saw changes going on in the English itself. We saw the old form of the plural 3rd person (*nt*) changed into *n* or *s* or *th*. What was the cause of this? When we find changes similar to our own in widely distant languages, not only Teutonic, but Scandinavian (in which the *n* and *t* are lost altogether) and Greek (where they are represented by *s*); when we find *nt* preserved in Latin, but gradually wasted in French, Italian, &c., the offshoots of Latin; we can have no doubt that the cause is a general one, and no other sufficient cause presents itself but that which is characteristic of all human action—the desire to do what is to be done with the least expenditure of energy. This desire is not consciously felt in all-action; but if not, it is present unconsciously; and, in language, man instinctively endeavours to make his utterance as easy as possible, consistently with being intelligible. This common cause will act in many different ways, of which I will only point out some of the most important.

24. (i.) People will substitute an easier sound for a sound or combination of sounds which they find difficult; or they will drop the sound altogether. The change of *nt*, which we have just been considering, is an example of this; and the unanimity with which it was changed, though in different ways, is a good proof that such a com-

bination was universally found disagreeable at the end of a word. Even the Latin, though it had *regunt* in the present, had a weaker form in partial use for the perfect—*rexērunt* and *rexēre*. There is no difficulty in pronouncing the sounds *nt* together, when one ends a syllable and the other begins one; they occur so without being changed in all languages; we have *pantos* in Greek; *conter* is the French corruption of *computare*, but it is changed no further; *firmentum* is an example of one of the commonest kinds of derivative nouns in Latin. Our *firment* and others of the class do not strike us as difficult; they show that even at the end of a word the sound is not insuperably difficult. We see from it that the weakening of *nt* in such a position is only a general tendency of language, not an invariable rule.

25. The reason of the different treatment of the noun and the verb is twofold. First, when *berent* was weakened into *berēn*, or *bereth*, or *berē*, no confusion arose, because each person of the plural was distinguished by the nominative case which went with it; but if the termination of a derived noun like 'firmament' be lost, the whole character of the word is in danger of perishing. Secondly, the personal suffixes of the verb were much more used than any one formative suffix like *-ment*; therefore it was more important to have an easy form for them; they were rubbed away, as we may say, under the wear and tear of daily use. The difference in these two cases illustrates what I said above; speech is to be made as easy as possible within the limits of intelligibility. When it is consciously felt that further change would make a word unintelligible, it generally remains unchanged; but even this limitation is often exceeded. French especially gives us numerous examples of pairs of words originally quite distinct which have come into the same form by a long process of corruption. Thus, the old French *dû* (obligation) is con-

tracted from *deü*, which can be traced back to *de(b)u(tus)*, a barbarous participle of *debeo*; *du*, the genitive of the article, is for *deu* = *del* = *de le*, where *le* represents Latin *ille*. These words when written are distinguished by the accentual mark.

26. Some sounds seem to be felt more difficult than others in most, if not all, the languages of Europe. Thus gutturals pass into labials occasionally; but the contrary change is hardly found. These changes, however, are not numerous in any language. As a rule we find the same sounds altered in different ways in different languages; or different sounds objected to in different languages. These two kinds of change produced in the beginning the differences of the languages; which differences afterwards increased according as the languages, once separated, varied their forms still further, each in its own way, and also increased their stock of words by borrowing from different sources.

27. Of the first kind take the changes of *k* (*c*) in French and in Italian; in French, it is changed into *ch* (pronounced *sh*) only before *a*; so *camera* becomes *chambre*, though sometimes the *a* may change afterwards into *i*, or *e* as in *chien* (*canis*) or *chemin* (*caminus*). We have already seen how this change spread into England, where it acted without distinction of the following vowel as in *child*. In Italian, on the contrary, it is not before *a*, but before *i* or *e* that the change into *ch* (pronounced *tch*) occurs, as in *cicerone*; the original of the title was certainly called '*Kikero*.' In English we let the sound sink to *s* in the combination where the Italian has *ch*; it is a shame to say how we miscall Cicero; and '*castrum*' has suffered further change in Ciren-cester, Glou-cester, &c.; in some cases we keep the *tch* sound, as in *child*, *chest*. Every one of these different changes has the same origin; they all arise from not raising up the tongue sufficiently toward the back part of the palate; it is

raised toward the middle part instead; and this is a less constrained position.

28. S is a sound which has been found difficult in many languages, especially in the middle or at the end of a word. The Greeks in particular commonly dropped it altogether, or at the beginning of a word changed it into h. The Latins changed it into r—not quite the r which we sound in England, but that which you hear in France, and to a less degree in Scotland, a ‘trilled’ letter, as it is technically called, made by laying the fore part of the tongue very loosely along the palate, and then making it vibrate by a sharp breath (Ch. VIII., 19). The position of the mouth for s is very similar; but the tongue is held more firmly. The change has been very frequent in the Scandinavian languages; it was also found in Frisian, and in Saxon, both on the Continent and in England. Thus iron in Old English was isen; and our commonest verbs show the same change: art is for ast, are for ase; the root of the verb was as, then es, as you see in Latin es-t: were is for wese, the root being was = ‘to dwell:’ cp. the German wesen. But this distaste for s did not lead to its loss from any of these languages; it was merely superseded by other sounds in different degrees.

29. Instances of the second kind of substitution, which arises from different sounds being disliked by different peoples, are tolerably familiar. I have already spoken of the French dislike of h (Ch. I., 20). It has either been dropped altogether, as in avoir (habere) or retained in spelling without being sounded. The French also disliked p and b in the middle of a word; so that Latin ripa became rive: avoir is from habere, as I have just said. Every one knows how much a German or a Frenchman dislikes the two sounds which we now represent by th, the sound of th in ‘thin,’ and of dh in ‘then.’ To us they seem perfectly simple and natural sounds. On the other hand, we cannot

away with the gutturals which are so simple to a German—the sounds heard in nach and ich (which differ slightly). Yet our writing shows plainly enough that these sounds formerly existed in our language: the gh in ‘through,’ ‘mighty,’ and such like words, was not always meaningless; and something of the sound is still heard in Scotland, where (as you will often have observed) the old sounds of English have been preserved more faithfully than in the South. We have either dropped the sound altogether, or changed it into f (‘laugh’), or modified the whole word in some strange way to avoid the difficulty. We may see all forms in our variations of the word *burgh*, which we sometimes call *burg*, as in Petersburg, sometimes *bury*, as in Sudbury, sometimes pronounce as *bruff* (Cumberland). In its general sense we pronounce the word *borough*, and so the old Roman camp (‘Brough Castle’) is pronounced in Norfolk; sometimes the sound and symbol are gone alike, as in ‘Peterbro.’

30. Often a language rejects some class of sounds altogether: the Greeks disliked the continuous consonants (Ch. VIII., 17), and had neither a ch (as the Germans sound it), nor a y, nor a v (except in dialects), nor sh, nor th, nor dh, nor always s, nor z (as sounded in ‘freeze’). Nay, the Greek may be distinguished in a general way from the Latin as a language which disregarded its consonants, and greatly developed its vowel-system: while the Latin was conservative of its consonants, and let its vowels sink from the fuller to the thinner sound—from *a* and *o* to *e* and *i*. Sanskrit is distinguished by its comparative poverty in vowels, and by the very great extension of its consonants. Not only has it momentary and protracted consonants of every class—guttural, palatal, dental, labial, but also a separate class of consonants, ranging between the palatals and the dentals. It has the apparently superfluous wealth of five symbols for nasals, and of

course corresponding sounds; in reality, however, most European languages have more than two nasals, but not symbols for them. We have the guttural nasal heard in 'sing,' but no symbol except *ng*; the Spanish has the 'palatal nasal,' the sound of which we try to denote by *ny*. Still no language but Sanskrit has five. We have not time to dwell further on these specialities of different languages; they form part of the phonetic system of each, and this is in every case a lengthy subject. But I have said enough to show that each nation shuns some particular sounds, and tries in different ways to find some easier utterance in their place. The sound is not absolutely lost, but avoided as far as possible. And we may be pretty sure that in the spoken language the corruption commonly extends further than in the written literature. In England, as we have seen, original *a* has passed into *o* in several words, as *home*, *bone*, &c. But in the south-west of England many other words are pronounced with an *o* where literary English keeps the *a*, as *land*, *hand*, &c.

31. (ii.) There is another very common way by which ease of utterance is aimed at. We have already seen instances of the principle (Ch. I., 17); how the plural *manni* changed into *menni* (later *men*) from the influence of the *i* upon the *a*: it drew the *a* nearer to itself, into the form *e*, which lies between the two, *a* and *i* (Ch. VIII., 24). This is technically called **Assimilation**. In these cases a vowel acts upon a vowel without being in contact with it; and this form of assimilation is especially common in Germany, where *mann* forms as its plural *männer*, and the adjective *männlich* (manly). But the change occurs most commonly when two consonants meet which are incompatible, or at least difficult to pronounce together. In Latin the word *sella* is made up of *sed* + *la*, the sitting-thing; now *d* requires a perfect block of the mouth by the tongue, whilst *l* requires an opening on one

or both sides of the tongue (Ch. VIII., 18); and these two positions are incompatible. So the expectation of this difficulty causes a change beforehand, that of *d* into *l*. The assimilation may be complete, as in *sella*, where the two consonants become the same; or incomplete when they only are made more like; this takes place in cases like *fowlz* (*fowl* + *s*) mentioned above—*l* and *z* are both soft consonants, and therefore more alike than *l* and *s*, which is hard. The latter form of change is very common in every language; so common that we hardly notice them, especially in our own language, where they are concealed by the spelling. The former is seen in A.S. *wif-man*, later *wimman*, now 'woman'; the English here, as generally, lets one of the two *m*'s drop. In ancient languages Latin was perhaps the most affected by this principle, and French inherited it from Latin, and carried it on still further. Thus in Latin *ad-rideo* became *arrideo*, *d* passing into *r*; it remained in *quadratus*, but has changed in French *carré*. So *fouflage* (forage) is from old French *forre*, which = Low Latin *fodrum*; the word was borrowed from the German—we have the parallel form *fodder*.

32. (iii.) There is a change the opposite of the last, which, however, is much more rare; we call it Dissimilation. This takes place when there is a recurrence of the same sound, or of two sounds which are formed in the same way, as *t* and *d*. It is inconvenient to place the organs of speech so soon in the same position again; therefore one of the two is changed into a more distant sound. A good example of this is to be seen in Latin; *ed* is a root meaning to eat, and *edit* means 'he eats'—but there is an older form *est*, which results from the *d* coming into contact with the *t* without an intervening *i*. You cannot say 'ed-t,' and therefore the *d* was changed into *s* in 'est,' even at the risk—as schoolboys know to their cost—of confusing 'est' (he eats) with 'est' (he

is). An example of change where the sounds are at some distance is to be seen in French; the Latin *peregrinus* has become *pelerin* (our 'pilgrim') to avoid the *r* in two successive syllables; and we have *pellegrino* in Italian, but there has been no change in the Spanish '*peregrino*.' The reason why dissimilation is much less frequent than assimilation is plain. There is much more likelihood that different sounds will come together in an inconvenient way than that the same or very similar sounds will so recur.

33. (iv.) Another cause of change of words is **indistinct articulation**. This is common enough in individual men; special peculiarities, however, have no effect upon a whole language. But often there is some sound, which is felt to be difficult by a whole people; and, instead of a mere change in the way we have seen above, it is sometimes pronounced without sufficient care and exactness; and this brings about different results. The commonest is this: another sound is heard together with the difficult one. We saw above (Ch. I., 6) that the Kelts in France found a difficulty in the *w* at the beginning of the German words introduced by the Franks, such as *werra*, which they turned into *guerre*. This arose from an imperfect attempt to pronounce the *w*. *W* is sounded by raising the back of the tongue towards—but not so as to touch—the back of the palate, and by rounding the lips. Now if the tongue be raised a very little more—so as to touch the palate—a slight *g* will be heard, because the tongue has unintentionally been put for a second into the exact position for *g*. This *g* may therefore be said to be produced by indistinct articulation. In process of time it became firmly established, and even expelled the parent *w*; which though written as *u* is no longer heard, either in *guerre*, or in English *guarantee*, &c. When a Latin word began with a *y*-sound, as *iocus*, the Italians allowed a *d* to slip in before it; and so *iocus* is now

sounded nearly as our *joke*—but spelt *gioco*. In words beginning with *j* which we have derived from the French, we do not keep the French *j*-sound pure; we let the *d* come in before the *j*—compare English *jealous* and French *jaloux*. Yet we have in the middle of a word the same sound as the French—e.g. in ‘pleasure,’ where it is strangely disguised by the spelling. It is not necessary, however, that a sound should be distasteful to a people for it to undergo such changes as these, though that was commonly the reason. *K* is a sufficiently popular sound; yet in several languages for want of sufficient care a *w* sprung up after it in certain words. A well-known example is the change of *kankan* (apparently the original form of ‘five’) into *quinque* in Latin; you will see how easily this took place if you understood the explanation of ‘guerre’—*k* and *g* are pronounced with the tongue raised in just the same way toward the back of the palate, the only thing further required for *w* is to round the lips, and this being done carelessly in Latin *kwo* (= *qu*) was sometimes heard instead of *k*. A further extension took place in other languages: *kw* passed into *p*. The lips after being once employed in sounding the *w* took all the work and turned the guttural into a pure labial; hence you find *pente* in Greek for ‘five,’ *panchan* in Sanskrit, and *pump* in Welsh. These changes must have taken place independently, for the Old Irish retains the guttural (*coic*).

34. Another result of indistinct articulation is to be seen in a vowel added at the beginning of a word, generally before an awkward combination of consonants. In such a case it is easier to use a slight amount of vowel-sound in order to get the consonants uttered. This was very common in Greek. Good examples are to be seen in French. Latin *species* became in France *espece*; *epice* (spice) is the same word a little disguised: *stare* became *ester*, *schola* passed into *escole* and then *école*. Spanish has the same use.

A curious parallel to *école* is found in the Welsh *y-sgol*: the word of course has been borrowed from the Latin, directly or through the English, but the prefix is the Welsh attempt to avoid the difficulty, and occurs in other words as *y-sbryd* = French *e-sprit*. In English this phenomenon is not found; but the *s* at the beginning of several words such as *scratch*, *screech*, &c., which is not part of the root, may be a result of lazy articulation.

35. We have, however, often added a letter at the end of a word through mere laziness: such is the *d* in *sound* (French *son* from Latin *sonus*) *lend* (but there is no *d* in *loan*), &c.; cp. German *niemand*, *abend*. The reason is that the organs of speech are in just the same position in pronouncing *d* as in pronouncing *n*; but in pronouncing *n* the air passes not merely through the mouth, but also through the cavity at the back of the mouth (called the pharynx), and so issues through the nostrils. Now let a portion of the breath be retained in the mouth after that which passes through the nostrils is spent; when the tongue is removed, and the breath passes out, an unintended *d* is produced (Ch. VIII., 17). In provincial English you may hear *gownd*. *Ancient, pheasant, tyrant, are good examples of t which has added itself in English to words introduced through France*: it has also crept into several English words which end with *s* after another consonant, as *whils-t, agains-t, amongs-t*, &c. This addition of sound at the end of a word is not however a very common phenomenon in languages.

36. But very common is the production of such a consonant in the middle of a word. The reason of this is simple: in passing from the position required for one sound to that required for another, the organs of speech may be in the position for a third sound; and if the break between the first and second be not sharply marked by the speaker, the third sound is very likely to be heard. Thus in English and French

alike the Latin *humilis* has become *hum-b-le*: the *b* has nothing to do with the meaning of the word: it has slipped in when the mouth opens, after sounding *m*, before the following *l*; the position for sounding *b* and *m* being the same, just as we saw it was the same for *n* and *d*; and so *camera* has passed into *cham-b-er*, and *thunor* into *thun-d-er*. It is noticeable that Northern English (partly because of the fuller sound of its vowels) has often retained the pure form: thus *thunner* is still heard in Cumberland, and *thimel*, not *thim-b-le*, and *aumry* (a cupboard) the French *armoire*, which has passed into *awmbry* in ecclesiological English. *Ramble*, *tumble*, and some other verbs owe their *b* to this source; neither of these words has the *b* in Cumberland. Spanish shows a greater tendency to this insertion than any other Romance language: thus we have French *homme*, Spanish *hombre*, Italian *nome* (name) but Spanish *nombre*. Well-known examples from Latin are the perfects *sum-p-si*, *prom-p-si*, and the supines *sum-p-tum*, *prom-p-tum*: there are plenty in Greek, one being *ambrosia*. In a small number of English words we find an intrusive *r*, which seems to be due to another *r*; it is indeed a sort of echo of it, as in *part-r-idge*, *cart-r-idge*, *co-r-poral* (French 'caporal'), *brideg-r-oom*, where the last half of the word is *guma* a man, the equivalent of Latin *homo*. *N* has slipped into a few words before *g*, as in *nightingale*, which in older English is *nihtegale*; *galan* is 'to sing' in Anglo-Saxon, and is found in Chaucer: so also in *passe-n-ger*, *messe-n-ger*; the older form of both these words is seen in French.

37. These are the principal ways in which words have been altered in such a way that the new sound is easier than the old one. We have seen that there is always a reason for the change, which can be given if we know the mechanism by which the sounds are made. If you will look at the short description of the different sounds (Ch. VIII., 16—25) you

will find the explanation of any terms which you may have found difficult in the examples which I have given.

38. There is a change rather common in language which is closely connected with those I have just described, to which I wish to call your attention for a moment. This is the desire sometimes felt to make up for the loss which a word has sustained. For example, when a consonant has been dropped out of a word, the speakers seem to have sometimes had an uneasy feeling that the word had been unduly shortened : and therefore, to make up, they lengthened the vowel. Thus there is a very old word found in a great many languages, *ghansa*, which meant some kind of water-bird ; it has become our *goose*. In German the bird is called *gans*, but in Anglo-Saxon the *n* was dropped, and to make up for this loss the vowel was lengthened, so that the name became *gôs*, and the vowel, though changed, is still long with us. By precisely the same principle in Greek *s* was dropped (not *n* as with us) and the vowel lengthened in *khên* : the Romans kept the *n* and *s* in *hanser*. I have already said that the Greek language was especially remarkable for dropping consonants ; and therefore Greek nouns, participles, and verbs provide countless examples of this compensation, as the principle is commonly called. The vowel is either simply lengthened, as in the participle *legôn* for *legonts*, or a diphthong is produced, as in *tithêis* for *tithents*. There is a fair number of similar lengthenings in Latin also ; but the Latin preserved the terminations from corruption more carefully than the Greek ; therefore the compensation is commonly for the loss of consonants in the body of a word, as in *cēpī* for *cēcipī*, *dēni* for *dēc-ni*. In these languages the 'quantity' of each vowel was fixed by use : a long vowel was not shortened arbitrarily, as it can be in modern languages ; quantity with us is no longer something fixed for all men's pronunciation,

which cannot be changed. This is the reason why a language like French, which has perhaps undergone greater destruction of consonants than any other, shows no clear traces of compensation. In French the ruling principle of utterance seems to be that each syllable should have very nearly the same amount of force and clearness, but quantity is not fixed.

39. There is another set of changes in the form of words which you will understand best by a few examples. In Old English the perfect tense in most verbs was formed by a change of the vowel: the reason of this we shall see farther on. A great many of these 'strong perfects' still remain in common use, as from *fall* the perfect *fell*, from *grow* *grew*, &c. But a great many perfects of this kind have been supplanted by different formations (technically called 'weak' perfects), ending in *d* or *t* (Ch. V., 16). There were perfects of this kind in early English, ending however in *de*, as *lokedede* (looked), *schulde* (should), &c.; but these were not so numerous as the stronger forms. By degrees this method of forming the perfect took people's fancy more than the other: and the old strong forms were superseded by weak ones. Just as *grow* made *grew*, so in old time *row* made *rew*; now we say *rowed*. We use *sowed* from *sow*, not *sew*; *shaped* from *shape*, not *schop*; *heaved* from *heave*, not *hove*: and countless more of the same sort, of which the older form still appears in our old literature, and some few survive locally. Sometimes in our affection for this new form, we make monstrosities by adding it on to the old perfect. Thus *leap* made for perfect *leop*, as you may see in "Piers the Plowman:" we say *leapt* where we have both the vowel-change, and also *t* (for *d*, see § 31) at the end. So the old perfect of *sleep* was *slep*, now *slept*; of *weep* *wep*, now *wept*, and uneducated people at the present day often use these older and more correct forms. But the newer form of the perfect has spread over the language,

and will do more so ; others will be coined after the same fashion.

40. Now these new forms are not in any way easier to pronounce than the old ones, but the new habit of making the perfect is superseding the older habit. The reason is not clear ; it may be ascribed to mental indolence, which dislikes preserving a variety of forms, or to an instinctive seeking after order and regularity, which prompts us to reduce apparent anomalies. Changes of this sort are commonly described as being due to analogy, because each new form is made on the analogy of those which have preceded it. They pass but slowly over a language, but very effectively ; and many of the most obvious differences between the ancient and modern language of a country are due to them. I may give an instance from Latin and from Greek. In Latin, as is well-known, the conjugations of the verb were divided by old grammarians according to the vowel which preceded the *re* of the infinitive : (1) *amāre*, (2) *monēre*, (3) *regēre*, (4) *audire*. This is not a very scientific division, but that is not now the point. The verbs of the third conjugation are certainly the oldest in the language, the others being derivative verbs ; and in Latin they are still the most numerous. But in Italian the tendency has been to conjugate all verbs as though they were of the *a*-class, though they may still retain some mark of their old form. Thus *cred-ī-mus* in Latin is *cred-i-ā-mo* in Italian, *habēmus* is *abbi-ā-mo*, *audīmus* is *audi-ā-mo*. Similarly in French it is computed that considerably more than seven-eighths of all the verbs belong to this conjugation. In Greek the oldest verb-formation in the language is the so-called 'verb in *mi*.' These verbs formed but a small part of the whole list even in classical times. In modern Greek they have vanished altogether, all being conjugated on one model. Modern Greek nouns tend to make their nominative after one type, so that all should end in *s*, e.g. *pateras* not *patēr*

(a father), *geros* not *gerōn* (an old man). This is a very curious instance of retention of an old principle which had seemed to be quite obscured. The old Greek forms ended in pre-historic times with *s*; and this *s* in *pater-s*, *geront-s* having been dropped, the vowel was lengthened by compensation (§ 38). The modern Greek has replaced the *s*. In our own language there is a noticeable tendency to form new verbs in *-ise*, e.g., *modernise*, *rationalise*, &c.; this suffix corresponds to the Greek suffix *-izō*, and came into English through the French *-iser* in a comparatively small number of verbs; but the list is yearly on the increase. Very parallel is the German verb-suffix *-iren*: when a German wants to naturalise a foreign word this suffix is repeatedly employed, e.g. *constru-iren*; nay, even though *-ise* may be there before, as *central-is-iren*.

41. This principle of analogy naturally acts, as in the examples which we have been considering, over large classes of words. But there are also changes produced by it in single words, or in but one or two. Thus *peas* ends in *s*, because the original final vowel *e* has been dropped. Hence it came to be regarded as a plural, and a singular *pea* was made for it. But *pease* or *pese* is the old singular form, and one may hear *peasen* from country-folk still. It is well known that the genitive *its* is a late form which does not occur in the Bible, *his* being used instead. The old English pronoun of the third person was *he* (masc.), *heo* (fem.), *hit* (neut.); *hit* was also the neuter accusative; so *t* was only the mark of the neuter in these two cases, and had no place whatever in the genitive case. When the initial *h* fell off, the history of *it* became obscure; its connection with *he* was lost; and as genitives were regularly formed by adding *s*, it was added here too. Both these instances, and many others which might be given, show the mistaken application of a rule to cases for which it was not

made; exceptional forms are made to follow the usual analogy.

42. The influence of analogy is often seen in the way in which we make our compound words. In English *mis* was prefixed to words to express something bad; it occurs as a noun in our older writers, e.g. in the story of William the Werwolf (man-wolf) where we have the line (532):

“ And to mende my *misse* I make my avowe.”

i.e. I make my vow to mend my fault. We still trace the noun in the adverb *amiss*; also in compounds such as *misdeed*, *mistake*; and this was the regular English form for the purpose. Something of the same sort was expressed by *dis* in Latin, and in the Norman part of our language, as in *disturb*, *discord*, &c.; parting in two seems to have been the primary notion of the word. Now when the English and the Norman vocabularies coalesced, it was natural that Norman suffixes should sometimes get prefixed to English words, and *vice versa*; and so instead of the English *mis-like*, there sprang up the mongrel *dis-like*, half Norman, half English; and by degrees it came to be the rule that all compounds of this sort required *dis*, on the analogy of those already existing. There is a well known instance in which one English prefix has driven another out. We had in old English *fore* = before, as in *fore-tell*; and also *for*, equivalent to German *ver* (*ver-bieten* = *for-bid*), and Latin *per*; the idea *through* or *across* has brought in by implication the further idea of harm or evil; thus *for-swear* has the same sense as *periuro* in Latin; and *for-shapen* could be used in the same sense as *mis-shapen*. But the history of this word was forgotten; and compounds with *fore* increased, till by degrees *for* was wrongly spelt *fore* in several words, whose etymology is thereby darkened. We talk of *fore-closing* in law, and to *fore-go* a thing, and in each case the false spelling suggests a false

derivation; *fore-fend* does not mean 'strike before,' but represents *for-fend*, 'strike across,' or 'out of the way,' 'prevent.' Note this last word; the English prefix is combined with a Latin root; which is seen in *de-fend*, &c.

43. These instances are enough to show how great an effect this cleaving to a rule, through right or through wrong, may have on a language. I have not time to point out how much of the same effect of analogy upon the mind is to be found in syntax; but Greek scholars may find good traces of it in the history of the genitive with the verb. Uniformity in accentuation is also produced in this way; in English we habitually throw back the stress as far from the end of the word as we can; and when we adopt foreign words, we accentuate them at last after some struggles in the same way (Cp. Ch. VIII., 36). This uniformity is not found in older English, as is obvious to anyone who will look at early rimed poetry, e.g. the metrical Northumberland Psalter. There in the translation of the Eighth Psalm, the verse 'Out of the mouth of babes and sucklings hast thou ordained strength,' appears as

"Of mouth of childer and soukánd,
Made þou lof (praise) in ilka lánd."

where 'soukánd' corresponds to 'lánd'. It was only by degrees that the analogy was established.

44. I shall mention but one more result of analogy. This is the change not merely in the suffix or prefix of a word, but in the whole word which is often caused by the attempt to find some meaning in that which seems to have none. This is strikingly exemplified in names of places. These commonly contain the name of some person; and if that proper name go out of common use, it is almost certain that the name of the place will be altered so as to represent some known object. Thus the Cumberland lake,

Buttermere, was the mere of Buthar, presumably one of the many Norwegians of that name who made themselves homes in the country at Butterhill, Buttergill, &c. Clearly there is no sense in the change; no meaning whatever is gained by it; but 'butter' was a familiar word, the proper name was unfamiliar; hence the change. Just in the same way, and in the same country, Bôt-haug, *i.e.* Bôt's hill, became Boat-hill, Geit's-garth became Gate-scarth, Sölvar's-seat became Silverside. The Norwegians became Englishmen, as much as the other invaders of England; they were absorbed into the greater body, and their descendants bore English names: and the old proper names were forgotten. Similarly Lizard Point is said to be a corruption of Lazar-point, *i.e.* an out-of-the-way place for lepers. Other corruptions of the same sort are well known; how Dun-y-coed, the Keltic of 'hill the wood,' has become Dunagôat; how the French 'Chartreux' has become the Charterhouse; and even the fairly intelligible 'Burgh Walter' has become Bridgwater.

45. Scientific terms naturally suffer severely by this method of handling. Gardeners make strange havoc of the names of plants. I knew one who always called China asters, Chinese oysters; and the power of finding an analogy must have been strained to the uttermost in the man who called chrysanthemums—Christy anthems! Names of diseases are pulled about in the like manner in country talk. In Sussex bronchitis is called the 'brown crisis,' and typhus sometimes passes into 'titus fever.' We saw above how local etymology acts on the names of animals (§ 19).

46. I have thus shown you the different kinds of change which are found in the form of words apart from their meaning. I have pointed out the general heads to which these changes may be referred, and tried to convince you that underlying the ceaseless

variation of spoken languages there are some permanent principles of general application. We have seen incidentally that all people are not affected alike by these principles, but that in one language there is more substitution, in another more assimilation; in one language the consonants will be affected, in another the vowels, and so on. But in all that we have yet done we have been seeing how languages change from some previously existing type. We have begun with the phenomena of language which are before our eyes, and tried to work back to some older form. Can we now see how that form was itself developed; how language grew up to a certain point, not how it has been decomposed therefrom?

CHAPTER II.

SOME OF THE WAYS IN WHICH LANGUAGES HAVE BEEN FORMED.

I. BEFORE a boy has got very far in his Latin grammar, he finds that he must say erit—one word only—when in English he would say ‘he shall be.’ He will learn that *erit* can be traced back to an older form es-sya-ti (see Ch. V., 14), and that the parts of that word carried respectively the meanings ‘be’ ‘shall’ ‘he.’ But there was never a time in the history of the Latin language, nor indeed centuries before Rome was founded, when those parts could be used separately. Similarly he will find that erat suffices instead of his own two words ‘he was’; sit represents ‘he may be’; fuerit is equivalent to ‘he may have been.’ From these he will infer that it is the custom of the language to express by one word modes of action which we express by several distinct words. Turning to the nouns he will find saxi when we should say ‘of a

stone' and *saxo* when we should say 'to a stone' or 'with a stone.' He will not be able to learn exactly what the final vowels of these cases meant even in the oldest and least corrupted form to which they can be traced back. But he will be at no loss to recognise in them the same principle at work as in 'erit'—the principle of tacking on to a part of the word, which remains more or less the same, certain sounds which indicate the relations which the noun or the verb bears to something else: whereas we express these relations by entire words put before the verb or noun. Further, if he knows other ancient languages, Greek or Sanskrit, or others, he will find them agreeing in their method with the Latin. He will therefore recognise two very distinct principles of formation, and will perhaps conclude that one distinguishes ancient language and the other the English language, perhaps all modern forms of speech.

2. This conclusion he will see some reasons for modifying. He has not to go much further in Latin before he will find traces of this seemingly modern method. He will find *amatus est*, two distinct words meaning 'he was loved.' If he could carry his study a little onward into late Latin he would be shocked to find *amare habeo*, 'I have to love,' used instead of *amabo* 'I shall love,' and his master will tell him that French, which is only a modernised form of Latin, has joined together this *amare habeo* into the single word *aimerai* (see Ch. V., 7). It is true that there was a time when *j'ai aimer* was used with the words distinct, and *ai* is not altered in form in the compound any more than if we wrote 'I-to-love-have' in English. But no Frenchman now thinks that *ai* means 'have' when in this connection; it is to him simply a symbol of future time. Even this clearness of form is lost in Italian, another derived form of Latin, which has mixed up *amaro* out of *amare ho*, and in Spanish

amare = *amar* *he*. Therefore in these forms, considered as a whole, he will see a return to the old process of amalgamation, and that of such a kind that the new elements convey no meaning in themselves, whatever the meaning may be which they once had; they have become grammatical signs, the reason of which has to be taken for granted in learning these languages. Again passing from these continental languages to his own, he will remember that there too he can speak of 'a stone's throw' as well as 'a throw of a stone,' and that 'stonestrow' can even be written as one word expressing a new idea, a vague measure of distance. So he will perceive that there is no fast line separating these two kinds of usage, that people can pass from the one form to the other in the course of time, and back again. But he will recognise two important tendencies, and will see that the one leads men to run the sounds which express the component parts of one idea into one word: and languages of which this is the prevailing characteristic are called synthetic, that is, amalgamating languages. The other tendency is to express the idea by different words each with a separate meaning: and this gives to languages like our own the title analytic, *i.e.* resolving and separating languages, even though the synthetic process be not unknown in them.

3. Languages may be found spoken at this day on the earth far more synthetic than Latin. Such is the Turkish, which from the root *sev* (= love) can make the verb *sev-mek* to love, and from that *sev-in-mek* to rejoice, and the causal of that *sev-in-dir-mek* to cause to rejoice, and the passive of that *sev-in-dir-il-mek* to be made to rejoice. Here it will be observed that in all these verbs *sev* always stands first and *mek* last, the new sound being bottled up, as it were, between the two; this is a variety of the principle not to be found in Latin or other languages akin to it, at least in historic times. The same principle of incor-

porating a new element into the middle of a word is to be seen even in Accadian, in which, *e.g.*, *in-zig* together meant 'he built,' but *in-nin-zig* meant 'he it built,' and the whole combination makes but one word. This Accadian language has been recently discovered, written in the cuneiform or wedge-shaped characters, which you know if you have seen the Assyrian lions at the British Museum; it is the language of the old Chaldees, and has been interpreted by the help of the bilingual inscriptions of the Assyrian kings, in which both Accadian and Assyrian characters are used. As Accadian is by far the oldest form of the languages of that family of which Turkish is the best known type, its importance is of the same kind as that of Sanskrit (see Ch. III., 3).

4. But languages formed in this incorporating way do not always preserve their elements distinct; this is the case with the languages of North America, in which ideas, the simplest as it appears to us, are expressed in compounds of direful length, the parts of which cannot be recovered and used again, as they can in Turkish or Accadian. The same is true of that curious language—the Basque—spoken in the south-west of France and the north coast of Spain. Here however the words are not inconvenient in length. But they are joined together so that the two parts are not clearly recognisable in the compound. Thus *bel-haun*, a knee, is said to be compounded of *belhar* (front) and *oin* (leg).

5. This brings us to an important point in the history of synthetic languages. In them the words may be joined together with different degrees of fixity. Thus it is possible to join words together so that every part can be used again separately. The Chinese and the languages spoken in the south-eastern corner of Asia, Annam, Siam, Burmah, &c., are of this sort. Thus, for example, a plural can be formed by adding to the singular some word meaning 'multitude,'

'company,' or the like ; much as with us 'mankind' can be used in a plural sense though it is singular in form ; but it is true that its use is chiefly to denote all men as one single class. We, on the contrary, should use for this purpose inflections, like *es* or *en* spoken of above, syllables which have lost their meaning and are not felt to be anything but grammatical forms ; they have been sanctioned by long use and their original meaning is quite unimportant. But it would seem that even Chinese is deserting its classical methods, and tending to inflections. Thus *wo* means 'I,' *wo-chae* means 'we:' this *chae* was originally a 'class' or 'company,' but now is not used separately ; it is merely a sign of plurality. But this change has not yet spread far over Chinese. Languages of this kind are generally called monosyllabic, because each of these independent words in Chinese consists of one syllable only ; but a better term is isolating, which expresses the completeness of each of the elements of such a speech.

6. It is curious to see how few of such units are necessary ; there are less than five hundred in all in Chinese, but they are eked out by difference of tone in pronunciation : the same sound represents different parts of speech (connected with the same general idea) according as it is spoken in a high or a low, a rising or a falling tone. You may see what I mean by difference of tone from the change in English if you say, 'John, who is here,' as a statement of a fact, and 'John! who is here?' as a vocative followed by a question ; in the second case 'who' is pronounced with a rising tone, and 'John' generally with a rise and fall of the tone on the same syllable ; in the first sentence the tone is uniform till the last word, then it falls by the almost invariable English practice. There is no rule in English fixing this variation of tone ; it is only a common use. But you may see from it that it would be easy to lay down rules of the sort, so that

the same sound should have different meanings according to its tone ; and in this way the Chinese manages to be perfectly intelligible. Indeed the evils of representing different ideas by the same sound are greater in appearance than in practice ; the context generally determines with sufficient clearness what is the meaning in each case. It is possible to make sentences in English where the same sound shall denote a verb, a substantive, and an adjective. Nay more, you may even repeat some of these in slightly different senses, without any danger of confusion. Thus I might ask you ‘could you bear (endure) that a man for a bare (mere) living should bear a bear on his bare back?’ Of course in *writing* ‘bare’ and ‘bear’ are distinguished, but we are talking now of spoken, not of written, language. To those who speak it Chinese is quite as intelligible as English to Englishmen. We should wonder, not so much at the applicability of their few sounds to language, as at the extraordinary permanence with which this system has remained for centuries nearly unchanged, as the speech of a highly civilised though unprogressive people.

7. But we have seen that even in China there are signs of change in the form of speech. Some words like ‘chae’ were becoming no longer independent, but only capable of being used in combination with others, to express change of idea, but not a new one. Now if all the words by which gender, number, person, &c. are expressed in Chinese had gone the way of *chae*, what would have been the result? We should find some monosyllabic words, complete in themselves ; but far more dissyllabic words, in which the first part is unchanged in form, and expresses always the same idea ; while the termination will be in every case only a subordinate element, capable of being put on and removed at pleasure. For example, while the first part of the word means ‘standing,’ ‘going,’ ‘greatness,’ ‘brightness,’ or the like, the movable parts

add the idea of some person 'going,' or the particular form of 'greatness;' and the whole word expresses 'I stand,' or 'he stands;' 'a great thing,' the 'being great,' 'causing greatness,' &c. But these last parts of the word cannot be used by themselves to mean anything; in fact, they will be like our syllable '-ness,' which expresses a quality when combined with 'great' or 'bright,' but no longer means anything by itself. This second syllable might then suffer change so much as to be no longer recognisable; just as (to return again to our own language) in *manhood* and *godhead* we no longer recognise the original English word *hád*, a state or condition. But the first part of the word remains unchanged, as much as *great* in *greatness*, or *man* in *manhood*.

8. This supposed case is quite true; there are a great many languages of this type; the languages of the nomad tribes which cover the wide steppes of Central Asia, or border on the North Sea, whether in Asia or in Lapland and Finland; and of many more isolated races in the south of Asia, in Ceylon and Southern India, in Tibet, Siam, Malacca, and the islands of the Pacific; and in southern and eastern Europe the language of the Magyars of Hungary, of the Osmanli Turks, and of the mass of the tribes which in Asia and south-eastern Europe make up the great Russian empire. These languages are not closely connected as a whole; in fact they break up into distinct groups, which geographically at least are unconnected; thus the speech of the Hungarians falls into the same group as that of the Finns; while Turkish has its nearest relation among the Kirghis tribes and the Yakuts. But they all agree in this principle, that they keep the essential part of each word, the root, uncorrupted; whilst the other syllables may suffer more or less of change; and since these syllables can be added to or taken from the unchangeable core of the word, the languages are called

agglutinative, that is, the languages which 'glue' or join on their varying to their permanent elements. The great mass of the tribes which speak these languages are nomad tribes, which have never been formed into a lasting political whole, and have developed no literature; and it has been suggested that the character of their languages is the result of the life of those who speak them. Languages which have no literature are liable to change fast and become unintelligible; but among scattered peoples intelligibility is essential if the intercourse among them, small though it may be, is to be maintained at all. It was therefore important to keep the radical portion of each word intact; to allow variation in the syllables which expressed relation only, but no variety in that which expressed the idea itself.

9. The peoples which speak the languages of this kind are sometimes called by common names in consequence; the commonest title is Turanian. But such names are better avoided, where there is no probable connection in race between the peoples so comprehended. The agglutinative languages are much too different to give any ground at all for believing that they all belong to the same family. They agree, as has been said, only in the general principle of forming their speech; but no common bond has yet been found to bring together the main groups of the so-called Turanian peoples; and it is not likely that there is any.

10. Next suppose that an agglutinative language should cease to keep distinct the radical and the formative parts of its words. Suppose that it should allow of some of the letters of the root to drop away, or let the last letter of the root run together with the first letter of the suffix, so that the two are no longer distinguishable. If this happen, the whole character of the language is changed. The root and the suffix have commonly coalesced, so that the

history of the word may be no longer capable of being seen immediately. In an agglutinative language you would be able to tell the meaning of the word (even though you had never heard it before) by piecing together the idea out of the different parts which you knew. But this you could do no more. No part of the word would of necessity suggest a meaning to you; you would need to be familiar beforehand with the whole word, either by ordinary use or by having learnt it from a grammar. It is probable that the words in this new state will be lighter and easier to pronounce; but they will not be so clear in themselves. Now this is the stage which all the European languages (save the Basque and those of the Magyars, &c., already mentioned) have reached. To this group, therefore, belong our own language and all those, whether ancient or modern, about which we are most likely to know something—Latin, or Greek, German, French, Spanish, or Italian. This class of languages is commonly called inflectional, which term distinguishes them from the agglutinative class, by expressing that the formative part of the word has lost all character of its own—which it need not do in an agglutinative language—and become a mere grammatical inflection. But the term does not fully express the complete amalgamation of the different parts of the word—the incapability of the radical part to exist by itself as a mere root, without the formative suffix, just as much as the helplessness of the suffix without the root. This is the essential difference of the two types of language; and for this purpose amalgamating would be a better name.

II. I have thus tried to show you three different types of language. But you must not suppose that any one language is so absolutely ‘isolating’, ‘agglutinative,’ or ‘amalgamating,’ as to exclude all traces of the other methods. We have seen that in Chinese there are forms which are at least agglutinative; nay,

in the strict sense of the word, they are even 'inflectional.' In the agglutinative Turkish, the suffixes are liable to corruption and loss of absolute identity; and this is seen even in Accadian, the oldest known form of the same type. Now, when this has taken place, we are on the high road to amalgamation; and this, we saw, has come to pass in the American languages, both Indian and Mexican, and in the European Basque. These languages, nevertheless, must be included under the 'agglutinative' type; they do not amalgamate so far that the separate parts of the compound are irrecoverable for separate use. Again, Finnish, an agglutinative language, has yet undeniable cases of nouns—indeed, far more than any of the typical European languages; and in the formation of some of these the root-form has suffered just as much as if the language were amalgamating.

12. Once more, in an inflectional language, such as English, you may find long compounds which really show all the types of formation. The word 'truth' is formed by the suffix *th* from a root, the ultimate form of which is uncertain; in Icelandic there was an adjective *tryggr* (see Ch. I., 10) and in Gothic a similar form *triggus*; and these, together with the old English form of the verb *throw*, point to a guttural as being part of the root; but this is uncertain; anyhow the root is obscured; the suffix too means nothing by itself; and we have an 'amalgamating' compound. But *untruth* is a compound of another kind; the first syllable has no meaning by itself and is never used alone; traditionally it means *no* in composition only; but take it away and *truth* remains a perfect word, as unaffected by the loss as a 'Turkish root. Next, *untruth-ful* is just like a Chinese word; you can separate the two words and each retains its meaning entire; no doubt *ful* seems to have lost an '*l*;' but it is really the old form, to which a second *l* was wrongly added, because it was found in the cases now

disused (genitive *truthfulles*, &c.); and therefore it was tacked on to the nominative also. You can make yet other derivatives or compounds of various kinds; such as *untruth-ful-ly*, where we know from history that *ly* is for 'like,' and each of us has some consciousness of the fact when we make the compound. But in *untruth-ful-ness*, though we mean a condition of mind and know that we mean it, yet we are not now conscious at all why *ness* should express it; we only know that it does so in practice. We have here then cases of older and younger agglutination. We quite forget what *ness* meant, we dimly remember what *ly* meant, we know quite well what *ful* means; the difference between the three kinds of formation is only a matter of time. And we infer that this will be true of languages as a whole; that there will be no impassable boundary between one type and another; that one will gradually pass into another, unless prevented by sufficiently powerful reasons, such as the nomad life of the Tartar, or the singular conservatism of the Chinese. But any language at any given moment may be rightly said to belong to one of these types, because that type represents the prevalent tendency of the language; though it may at the very same time show traces of one or more of the others.

13. I cannot speak further of the languages of the older types, important and interesting though they be to a student of language; the slight reference which I have made to some of the most striking of them must suffice. I now proceed to enumerate the languages which we call inflectional. They are spoken by nations who have done more for the development of the world than any other people; and it is with some of them that we are constantly brought into contact.

CHAPTER III.

THE PRINCIPAL LANGUAGES OF THE AMALGAMATING TYPE.

1. THE first group of languages of this type is called **Semitic**, from Shem, the son of Noah, described in the Bible as the ancestor of some of the peoples by whom it is spoken. Its most important divisions are the Syriac, with the extinct Assyrian and Babylonian; the Hebrew and Phœnician; and lastly, the Arabic and some Abyssinian languages. The Hebrew and Arabic have made important contributions to the religious history of the world in the records of the Jewish and Mohammedan religions. The Semitic languages are remarkable because of their curious triliteral roots, that is, roots consisting of three consonants, which remain unchanged in all relations; such relations being expressed by change of the vowels only. This permanence of the root form is as great as in the agglutinative languages; but it is much more difficult to explain. It seems rather to belong to some artificial cypher than to languages in actual daily use. But whatever the explanation be, the fact is there.

2. The second great group of amalgamating languages is called **Indo-European**; it is spread over a much larger, and now a more important, area than the Semitic. In England, Holland, Denmark, Germany, and Scandinavia; in France, Spain, Portugal, Italy, and Wallachia; among the numerous Slavonic peoples, including the greater part of Russia in Europe; in Greece and Albania; in Persia, Bokhara, and Armenia; and lastly, in the great peninsula of India, are still spoken the numerous languages which can be proved to be the descendants of a smaller group of languages certainly related, but now extinct;

all of which again point to one common speech, and can be explained in no other way but as the daughters of a single parent-language. This original language, with its different descendants, is called variously Indo-European, Indo-Germanic, and Aryan; the first name aims at giving an idea of the country covered by these languages, and is fairly correct, but rather cumbrous; the second title is much used in Germany, and is clearly insufficient; the last is inaccurate, for it is applicable to the Asiatic branch of these languages, but to no others; yet its convenience has made it popular in England, where it will doubtless outlive the others. The extinct languages which, when compared together, caused the discovery of this long-perished Indo-European language, do not exactly correspond to the political divisions above mentioned; some of them have left descendants, which are now spoken by the subjects of wider empires, where other languages are dominant.

3. First comes the **Sanskrit** or old Indian; this language has an especial value, because its roots and suffixes, and, generally, the principles on which its words are formed, are more easily discernible than in any other language of the family: indeed it was the discovery of this language which first made clear the existence of such a family: the other members of which showed much more blurred copies of the originally common system. In this language there exist epics, plays, and philosophical works of great value for the history of human thought. But for philology the most important relic is a large collection of hymns (called collectively the *Vedas*); though their age is not certainly known, they are undoubtedly older than any other literature of the Indo-European race: and they are equally valuable to the student of religions as to the student of language; to whom they present an older form of the language, differing from classical

Sanskrit as much as the English of Chaucer from the English of the present day.

4. Next comes the old Persian or **Zend**, which can also be traced through a considerable history. It is found, like Sanskrit, in its oldest form in the Gâthâs, hymns of a great but uncertain age, which form the oldest literature of the fire worshippers of Persia. This collection (with additions) is called the *Zend-avesta*. In a modified form this language was found on the rocks of Behistun and in the ruins of Persepolis : the inscriptions described the deeds of the Achæmenidean kings, of Darius and of Xerxes. The cuneiform characters seem to have been borrowed from the Assyrians (a Semitic race) who themselves borrowed them from the alien Accadians. A later form, *Pehlevi*, is found on the coins of the Sassanidæ in the third and following centuries A.D., with many Semitic words introduced. The *Parsi*, which differs little from modern Persian (except in its freedom from the Arabic words which the creed of Mohammed has brought into Persia) is the language of the great Persian epic the '*Shâhnameh*,' which dates from about 1000 A.D. The importance of the *Zend* for a philologist consists chiefly in its close original agreement with the Sanskrit, and the light which is therefore sometimes thrown on dark places of the better known language.

5. These two languages are sometimes classed together as forming the **Asiatic** divisions of the whole family. They are distinguished from the **European** languages by some well-defined phonetic differences.

6. The **Greek**, with its different dialects, may come first of these. This language has developed the common inheritance of words and forms with more individuality than any other. In general, as we saw, it is distinguished by its elaborate vowel system and by its comparative neglect of consonants.

7. Next comes the **Latin**, which with the cognate languages of ancient Italy, may be traced with great

accuracy, as it passes into its modern forms, the French, Italian, Spanish and Portuguese, the extinct Provençal, and the less known, though not less important to the philologist, languages of the Grisons and Wallachia, planted* there by the Roman military colonies.

On the importance of these two languages there is no need to dwell. Suffice it that in them we may read the highest development of ancient thought and law.

8. With them is sometimes combined, in a **South European** group, the **Keltic**, divided into (1) the Kymric, still spoken in Wales, extinct as a spoken language in Cornwall, and lingering in Brittany; and (2) the Gadhelic, known as the Erse in Ireland, the Gaelic of the Scotch Highlands, and the Manx of the Isle of Man. All these six varieties differ as dialects of the two main divisions—which in their turn differ somewhat as Latin differs from Greek. They are or have been spoken by people who are politically incorporated with other races speaking very different tongues. They are separated from each other, being spoken in different areas with no direct communication; and might have been expected to become extinct long ago. The Irish may be partly maintained as the language of a people differing in thought and feeling from their English rulers. But even the Welsh and the Gaelic recede but slowly; it is not impossible even now to find people in Wales and the Highlands who can speak no English, though it is regularly taught in elementary schools; and in Wales, newspapers are published in the Welsh language, which is further fostered by prizes at annual meetings, and more effectually by being used in the Church Service at least once on each Sunday in the mountainous parts of the country. These and other causes may delay the end, which must, however, come at last; and the philologist must be thankful for the respite.

9. It is maintained by some scholars that the Keltic is more nearly akin to the Latin than to any other of the large European groups of language. This is likely, but the proof is insufficient, and depends on evidence too minute to be brought forward here. If the fact is so, it helps to explain why the Keltic tribes of Gaul and Britain became so completely Romanised.

10. The remaining languages of the Indo-European class form what is called the **North European** group. In this are comprised

11. The **Lithuanian**, a language now spoken in different forms only in some of the Baltic provinces of Russia and Prussia. It is important to the student of language because it has preserved its inflections with singular fidelity down to very recent times. Not only are the verb suffixes wonderfully perfect, but it has also preserved regularly forms which are otherwise not found, or only as exceptions, in any European language ancient or modern. But like the Kelts, the speakers of this language have ceased to form an independent nationality.

12. The **Slavonic** is spoken in different forms in Russia, in Bulgaria, in Servia, and in Styria, Croatia, and the small adjoining provinces, under the general name of Servian, in what once was Poland, in Bohemia, and in some other unimportant districts. The Servian had, and now has, some literature; so also the Bohemian. But to the philologist the chief interest lies in the 'Church-Slavonic,' the old Bulgarian speech into which the Bible was translated in the ninth century. From it we find that Slavonic, with the Lithuanian, lies nearest to the last, and for us the most important group of the series.

13. This is the **Teutonic**. It includes:—

(1) The **High German** with its different steps from the eighth century down to the present time, at which it has become the common language of the

South Germans, and the literary language of the entire empire; this is due to its having been the speech of Luther, into which he translated the Bible.

(2) Under this same head fall the **Scandinavian** languages, spoken in Sweden, Denmark, Norway, and Iceland. Iceland was colonised by the Norwegians in the ninth century, and there the Norwegian or Norse tongue was established. Its fate there has been almost unique in the history of language; for in its isolation it has remained nearly unchanged down to the present day, as can be seen in the so-called *Eddas* which preserve traditions of the tenth century, rude epic narratives of the exploits of Scandinavian gods and heroes; their popularity has doubtless contributed much to the fixity of the language. In the present day the language of Norway and Denmark is practically one; that of Sweden differs slightly. The present annexation of Norway to Sweden instead of to Denmark is therefore the union of like to unlike.

(3) The third great division of the Teutonic is called **Low German** because spoken as the ordinary language of every day in the lands which lie toward the German Ocean and the Baltic. The form in which it has been preserved longest is the Gothic, spoken in the province (once Roman) of Dacia; the Bible was translated into it by Ulfilas, a Gothic bishop, in the fourth century; and fragments containing the greater part of the New Testament have been preserved; in this we naturally find, for the most part, the oldest traceable forms of Teutonic speech. No direct descendant of Gothic survives to our day. But all the other languages of this division have their modern counterparts; the Old Frisian, which is still spoken in a modern form in Sleswick, in Holstein, and on the coast westward to the Weser; the old Saxon, in which was written the 'Heliand,' a verse paraphrase of the Gospel narrative, originally spoken on

the Ems and the Weser, now represented by the Platt Deutsch; the Dutch, and the Flemish, of Holland and Belgium; and, lastly, English may have been spoken in a separate form by the Angles in Sleswick, though it cannot have differed much from the Frisian which touched it on the south; it was nearly akin to the Saxon dialects, by the side of which it was destined to exist in England, and eventually to give its name to the language of the whole country.

14. The Scandinavian and the Low German languages agree very closely in the forms of their words, so much so that they are sometimes all classed together as Low German; the phonetic changes have been very much the same. In this they differ considerably from High German; but High German also has varied considerably from its eldest form, and so far has approached nearer to the Low German. But the great difference which still remains can be easily seen from a few examples; thus we find:—

LOW GERMAN.	SCANDINAVIAN.	HIGH GERMAN.
Gothic—tunthus..... Dutch—tand English—tooth (A.S. tōð)	Icelandic—tönn Swedish—tand . Danish—tand ...	zahn.
Gothic—deds Dutch—daad English—deed	Icelandic—dáð. Swedish—dåd .. Danish—daad ..	that (pronounced 'tât,' and so written in old High German.)

15. These examples may be sufficient to guard you from an error which is not uncommon among young etymologists. It is well-known that English is a Teutonic language; notwithstanding the infusion of

numerous Latin words through the French, the grammar of the English language remains corrupted indeed, but essentially Teutonic. Now, High German, the literary language of modern Germany, is the only Teutonic language, except our own, with which the mass of us are familiar : therefore, we often find that English words are compared with their German equivalents, as though these presented the nearest analogy to them (which the instances above given show that they do not) ; nay, we find them even *derived* from the German, as though our forefathers had come from Sleswick speaking modern High German ! Very often such derivation is palpably impossible. That the oldest Teutonic form of the word was ‘tunth’ (possibly with some further suffix) may be seen from the Sanskrit *danta*, and Latin *den(t)s* : these words differ according to the regular variation between the Teutonic and the Indo-European (see App. I), which Sanskrit, Greek, and Latin in this point represent accurately ; but they show the nasal and dental at the end of the word, just as the Gothic and the Dutch do ; indeed in Old High German itself the word was *zant*. Now English has thrown away the *n* (lengthening the vowel in compensation) and kept the *th* ; German has thrown away the *th* and kept the *n*. How is it possible that the English word should be derived from the Modern German word ? But it cannot be derived even from the older form of the German word ; the *z* by the ordinary laws of phonetics could not pass into *t*, though a *t* may pass into a *z*. If, therefore, either word was derived from the other, the German word was derived from the English. But there is no derivation one way or the other. The Angles and Saxons brought into England the speech of their fathers, which differed as a dialect from that of the ancestors of the South Germans ; and these differences have been developed since. Modern High German is but a remote cousin of English ; the nearest relations of

our speech are to be sought on the shores of the Northern and the Baltic Seas.

16. In this description of the different forms of human speech, we have rapidly passed in review the chief languages of the world. We have seen that many languages can be formed upon a common principle, without its being necessary or warrantable to assume any bond of kinship between those who speak them. May we assume such a bond between those who speak inflective languages? Certainly not between the Aryan and the Semitic peoples. Without deciding on the question what degree of kinship community of language implies, we make our answer that here language gives no reason for the assumption, because, when we have traced each family back to the oldest form that we can reach, the results are still far asunder and do not even seem to be approximating. Nothing can be more unlike than the irregular, but generally monosyllabic, Aryan roots, and the trilateral Semitic ones. Plausible comparisons can be made between the numerals and even the pronouns of the original languages ; but the former are the most likely parts of foreign languages to be assimilated, in order that barter may be carried on between people speaking different languages ; and the latter are the parts of a language which from constant use are most liable to decay from within. Language, then, can say nothing for a common origin of the Aryan and Semitic races, much less for the original unity of man. On the other hand it can say nothing that is conclusive against it. For so immense are the changes which take place in languages, particularly those of uncivilised races, even in historic time, that it cannot be denied that languages apparently so utterly diverse as Hebrew and Greek may have sprung from one stock ; but it must have been a very long time ago. In fact, on this point the science of language should be dumb.

17. But may we conclude that at least all those

who speak Aryan languages are connected by race? May we believe that each of us is (say) 250th cousin to a Hindû, and perhaps 200th to a Russian? Much of what is said by those who deny this relationship may be readily granted. Thus it may well be that some island in the Atlantic or Pacific now tenanted by Europeans, may have been found by them inhabited by savages, who have disappeared before a higher civilisation, and left absolutely no mark in the shape of language by which after one or two generations any one could know that they had ever existed. Nay, such may be the case even with Australia, an island as big as a continent. There can be little doubt that the black men there are doomed to utter extinction; and though they may have enriched English with the word 'boomerang,' and one or two more, this would be scanty linguistic evidence apart from historical record. Come home to England: has not the Kymric language died completely out of Cornwall? and yet must not the blood there certainly be far more Keltic than Teutonic? Have not the Kelt, the Roman, the Teuton, the Dane, the Norseman, combined to form the English race? and yet don't we all speak, different dialects indeed, but all dialects of a Teutonic language? These questions are often asked; and those who ask them see no answer to them.

18. Now English is certainly one language, yet the vocabulary is separable; and any one who knows the languages akin to those out of which it is formed, can without much difficulty point out its component parts. Some of the evidence of this we have already seen in our sketch of the English dialects; but much more can be found by a close observer. He will see how the Scandinavian settlements in the east and north-west of England are shown by the grammatical forms *till* for 'to' ('gang till him' = go to him) *at* for 'to' ('what hasta at do' = what hast thou to do); by the plural

form *are* instead of *beoth*, now common over the whole language ; perhaps by the northern conjugation *I is, thou is, he is*, which remind us of the Danish *jeg er, du er, han er* (in which *r* stands for *s*) ; perhaps (though this is disputed) by the north country article *t*, 't house,' 't ky,' which looks very like the Norse *et*, a very different form of the article from the English *the*. He can tell the different times at which words of Latin have been introduced into England (*Primer of English Grammar*, p. 5), and could thus draw out a rough sketch of English history.

19. Still more light can be thrown on the history of this country by the names of places. 'Craig,' 'glen,' 'combe' and 'pool' still speak to us of the time when land and water were the heritage of the Kelt ; and many a scattered 'pen' from Cornwall to Cumberland, from Yorkshire to the Grampians, many a 'tor' in Devonshire and Derbyshire, attest the same fact. Language can tell him, what he knows from history, that the Scandinavian pirates who settled in Cumberland were mainly Norse, he knows it by the 'thwaites' in which they settled, the 'garths' which they built, the 'gills' and the 'forces' to which they gave their names ; for *thwaite* is the Icelandic 'thveit' (a piece of land) ; *garth* is the same in meaning as the English 'yard' but different in form ; *gil* is frequent as a local name in Iceland for a narrow cleft at the side of a main valley ; *fors*, a waterfall, is now a 'foss' in Iceland, as in Norway ; but the preservation of the *r* in England led to its confusion (in spelling) with our English 'force.' He will connect this cluster of Norse names with the Norse word *ford* in Milford, Waterford, and Wexford ; and so will be able by language alone to trace the course of the pirates who sailed round the north of Scotland, and settling themselves in the Isle of Man, spread forth to Cumberland and down the Irish Channel. On the other hand, he will see that the Scandinavian occupants on the east were Danes

by the extraordinary number of places which end in *by* in Leicestershire and Lincolnshire and northward through East Yorkshire. This is a regular local suffix for a town or village, in Denmark and Sweden; the corresponding Icelandic word 'bær' is used of a farm or farm buildings. In Cleveland (N.E. Yorkshire) it is reckoned that at least three-fourths of the nouns which occur in Domesday are Danish. Lastly, in Cornwall the evidence to be derived from the names of places is overpowering. Though nothing but English is now spoken there, nevertheless, until the rivers, hills and towns have all changed their names, the history of the country will remain written therein as plain as any book to those who have eyes to see. Even in Australia the names of some of the rivers seem likely to be perpetuated; and such a name as the Murrumbidgee would be fair proof that the English were not the first inhabitants of the country.

20. When two different languages contend for mastery in the same country, there are many causes which may determine the victory, and it is not possible to do more than to lay down as a general rule that the language of the more civilised people will remain predominant, whether they are the conquerors or the conquered. They have names for things which are strange to the ruder race; and these are naturally adopted at once into the poorer language. Thus although the Franks became masters of Gaul, yet the language of the Romanised Kelts survived, though modified in many strange ways. Perhaps the strangest of all is the translation of Teutonic words brought by the invaders into a Latin form, as *l'avenir* for *zukunft*, the future; *contrée*, for *gend*, country. Again, a conquering race is generally less in number than the conquered; whom it rarely attempts to extirpate, preferring to keep them in a state of greater or less servitude. Thus the English language could survive the Norman Conquest; and appear English after

centuries, only full of Norman French words and with a very much reduced grammar.

21. The case is somewhat different in an invasion by a numerous savage horde; this either sweeps past in its desolating course, and leaves no other trace behind; or it permanently occupies a country and its language takes the empty place, as that of the Huns. We have seen that the same may be the case when a European nation eradicates a savage one. But mixture of vocabulary and modification of grammar is the common result of the coalescence of two races not utterly diverse in civilisation; and this mixed language indicates mixture of blood. But there is no reason to suppose that any people speaking an Aryan language has ever been so utterly displaced by some non-Aryan tribe, that the blood of the succeeding race should be utterly changed and yet the language remain Aryan. On the other hand it is highly probable that some Aryan races (especially the Indian) have invaded a non-Aryan country and dispossessed the older people. Here there was doubtless some mixture of race, the amount of which we may very roughly estimate by the traces of mixture in the resulting language; though this test is far from certain, because languages change internally as well as from external causes. But clearly in such a case a large portion of the blood is Aryan; and the result would seem to be that in each nation of Aryan speech there must be some cousinship however distant: there is community, not identity, of blood.

22. It is possible to trace back singly the different lines of speech which we have briefly described, and to arrive at a common Indo-European language, which must have been spoken by a fairly civilised tribe. This language contained words for all the common relations of life—father, mother, brother, sister, son, and daughter. Some of these can be still further analysed; others probably trace back to an earlier

time, and it is useless to try to find out why such names came to be used. *Patar* (father) and *matar* (mother) may even belong to the childhood of speech itself, the suffix only being peculiar to the Indo-European speech: we cannot say. But *son* means 'one who is begotten' and the *daughter* was the 'milkmaid' of this primitive family. The connections by marriage have their terms; there was a name for the daughter-in-law—'she who belonged to the son'—for the father-in-law and for the brother-in-law, of doubtful meaning. The house existed, not the cave or hole in the rock; and it had doors, not the half-underground passage of the Siberians. The people had sheep and herds, the tendance of which was their main employment, and of agriculture we see the beginnings, the knowledge of some one grain, perhaps barley. They had horses to drive, not to ride, goats, dogs, and bees; from the honey they made a sweet drink (*madhu* our 'mead'); they made clothing of the wool of the sheep and the skins of beasts. They had to guard against the wolf, the bear, and the snake (of some sort). They dressed their food at the fire and they were acquainted with soup. They also knew and could work three metals, gold, silver, and copper. They used in battle the sword and the bow. They made boats, but they knew not the sea. They could reckon up to a hundred, and they divided their time by months, according to the moon (the measurer). In religion they had no clear term for God, but seem to have personified the sky as the Heaven-father, the source of light and life. Clearly such a race as this, so far advanced in the knowledge of the necessities and even of many of the comforts of life, differed widely from the infinite number of savage races which even now occupy the world; it is not among the Indo-Europeans that we must look for the first beginning of man upon the earth.

CHAPTER IV.

HOW OUR WORDS WERE MADE.

1. How did this people and the different peoples descended from it make their words? We have seen already (Ch. II., 10) that their languages were inflectional in the main in their earlier days, and therefore synthetic; that they become analytical later on. We therefore expect to find words composed of different elements, which are not capable of separate use; these may at first be unrecognisable, but by analysis of the word, and by comparison of the different forms which it takes in different languages they may often be recovered. And so in that primitive Indo-European language which we have described, we do find syllables, called **suffixes**, which denote relation, attached to other syllables which denote an idea generally. These last are called **roots**, and of them we shall soon have more to say. Thus we know, because the derived languages attest the fact, that in Indo-European *ad-mi* meant 'I eat,' the idea of eating in relation to me; *vāk-as* meant 'of speech,' speech considered in relation to something else, as 'the sound of speech.' These **inflectional suffixes**, as they are called, *mi*, *as*, and the like, will require full explanation.

2. But there is something else to occupy us first. These two words *ad-mi* and *vāk-as* are simple forms, where the inflectional suffix is added at once to the root; but this is not commonly the case. There were other suffixes, called **formative suffixes**, which were used to make roots into nouns and verbs, to which inflectional suffixes were added afterwards. Thus to the root *dā* (= give) was added the suffix *tar*, and *dātar* meant 'a giver,' but not yet

in any special relation ; as was then added if you wanted to say 'the money of the giver' (*dātāras*, Latin *dātōris*, Greek *dotēros*). This intermediate step between a root and a word is called a **base** or a **stem** ; the first term means something which is not yet a real word, but is the basis of one ; when the necessary inflectional suffix has been added.

3. This middle form is clear in languages in the synthetic stage ; in these the base is used as a word only when the suffix has been lost, for example in the imperative mood, as Latin *dic*, *fac*, originally *dic-e*, *fac-e* ; the vocative case, as *dator*, 'giver,' might seem an exception, since here no suffix has been lost, for none was put on ; but the vocative does not express that the person called upon stands in any relation to anyone else, and therefore no suffix is needed. In modern analytic languages the suffixes have often perished wholesale, and the base is left to do almost universal duty, as in English, where *giver's* is the only remaining case of the singular, and there is but one case-form *givers* for the plural ; and we say *I bear*, *you bear*, *we bear*, *they bear*, without any surviving suffix whatever.

4. Suffixes added directly to the root are called **primary suffixes**, but they can be added again to a base, in which use they are called **secondary suffixes** ; thus *spinster* is a base formed from *spin* by the suffix *ster*, which was used in Old English as a mark of the feminine gender ; you can then add a secondary suffix *ish* and make a secondary base, used as an adjective, *spinsterish*. These suffixes are very numerous, especially those used to form the bases of nouns. Each language has developed many of its own ; thus *-ock* (in *bullock*, *hillock*) ; *-kin* (in *lamb-kin*, *nap-kin*) ; *-ing* as a patronymic (in so many names of towns, as *Wellington*, *Willingham*, &c.) seem to be especially Teutonic, or at least were much more used in that branch than in the Eastern

or Southern languages of the common family. But a great number can be traced back to the parent speech. Naturally they have undergone many changes of form in their wanderings. I will give examples of a few of the most recognisable in languages of which you may at least know some. For the changes of some of the letters see Appendix 2.

5. **Tar**—denoting the agent in Lat. *da-tor*, Gr. *do-tēr*, also in Lat. *ac-tor*, *vic-tor*, *tu-tor*, &c.; denoting relationship in Lat. *pa-ter*, Gr. *pa-tēr*, Eng. *father*, Germ. *va-ter*, also in Lat. *ma-ter*, *fra-ter*: in a later form **tra**, denoting instrumentality, slightly changed in Germ. *mor-der*, Old Engl. *mur-ther*, our *mur-der*, also *laugh-ter*, *slaughter* (root *slag* weakened into *slay*, and in cricketer's English to *slog*), perhaps in *rudder*, and *fodder*; but here the double *d* is a later spelling, and the suffix may be only *-er* (as it certainly is in *leath-er*, A.-S. *feð-er*, from root *pat*, Sk. *patra(m)*, and *pat a-tra(m)*, *ptero(n)* for *pte-tro(n)*); in *needle*, (Goth. *nê-thla*, for *nê-thra*); in Lat. *ara-tru(m)*, Gr. *aro-tro(n)*, also Lat. *ros-tru(m)*, *claus-tru(m)*, and many others.

6. **Ant**—especially used in present participles, as in Lat. *fer-ent(is)*, Gr. *pher-ont(os)*, Engl. *bear-ing* for O. E. *ber-ende*, in Germ. *geh-end*, *arbeit-end*, &c., in Fr. *aim-ant*, &c.

7. **Ma**—as in Lat. *fu-mu(s)*, Gr. *thū-mo(s)*, Old Germ. *tou-m* (smoke); in Lat. *for-mu(s)*, (hot), Gr. *ther-mo(s)*, our *war-m*; of this last word the Indo-European form was *ghar-ma*, from which the derived words have changed so much in form according to the tendencies of the different languages; also in our *ar-m*, *home*, &c.

8. **Man**—as in Lat. *no-men*, *ag-men*; and with a secondary suffix, **to** (originally **ta**), in *augmen-to(m)*, *vesti-men-to(m)*; whence the Fr. *vête-ment* and our *vest-ment*, and the countless other words in each language, some borrowed from the Latin, others

formed within the language on the analogy of the others, as Fr. *ménage-ment*, our *endear-ment*, *atone-ment*, &c., where the Latin suffix is added to English bases. The simple suffix *man* was found in Gothic too, though the *n* is lost in the cases, as *na-man* (nominative *namo*), our *name*.

9. **Mat**—as in Greek *o-no-mat(os)* from the same root *gna* ‘to know,’ which with a different suffix made *no-men* in Latin.

10. **Ta**—especially forming past participles, as in Lat. *fac-tu(s)*, *na-tu(s)*, *al-tu(s)*, the last word like many participles having become an adjective; in Greek *klu-to(s)*, *gnō-to(s)*, which are also in use only as adjectives, having been superseded by a different form for the participle, i.e. *meno(s)*; in our own *love-d*, *hate-d*, and adjectives *loud* (the very same word as *klutos*, unlike as it now seems, but cp. A.-S. *hlúd*), *naked* (once the participle of a verb, which we find in Chaucer: “Why nake ye your *baies*?”), &c.

11. Other very common suffixes were *i*, *u*, *ya*, *va*; but these changed their forms so very much that you would not recognise them at first; you may find them especially in Greek and Latin, where they played an important part, as soon as you know the regular changes which consonants and vowels of the original speech underwent in each of these languages. Some of our most important English suffixes were not used in Greek and Latin, or at least played no great part there. Such are *-ing*, *-ock*, *-ish*, *-kin*, or *-ster*, already mentioned; this last is now used without regard to sex, as in *maltster*, *tapster*; it was an English suffix (like the others here mentioned), and was superseded by the Norman-French *-ess*, which had the same force. This caused curious compounds sometimes; thus in Old English *sang-ere* (singer) was masculine, and *sang-estre* (songster) was feminine; then when this distinction was forgotten we added ‘ess’ to *songster*, and made *songstress*, a double feminine. We

have taken a great many Latin suffixes in French or Latin words, such as *-ine* in *div-ine*, *-ive* in *capt-ive*, *nat-ive*, *-ion* in *suspicion*, *-tude* in *forti-tude*, *-able* or *-ble* in *culp-able*, *sta-ble*, &c.; and these (like *-ess*) we add to English verbs and nouns with perfect unconsciousness, as *eat-able*, *sport-ive*, and the like.

12. Suffixes used in the formation of verbs were rarer than those used in the formation of nouns. There were indeed several employed to distinguish certain tenses of a verb, as we shall see hereafter; but not many which are found throughout all the tenses, which we therefore suppose were meant to distinguish a verbal base from a root, or to make a form to which it was easier to add the inflectional suffixes. The commonest suffix is *ya*, or *aya*. There is a root *varg*, meaning to *work*; to *ya* was added in Greek, and made *varg-ya*. Greek change of vowels, *verg-yo*, and by regular consonantal change *vregyo*, *vrego*, *rezo*: in Gothic the word became *vaurk-yan*, (v)erg-ol, our own verb *work*. Often, however, this suffix expressed a modification of meaning in the verb: thus *bhar* meant to *bear*—Greek *phero* and Latin *fero*; but *bhāraya* meant to ‘cause to bear,’ Greek *phoreo*, where the *e* is all that is left of the original *aya*. So *dar* is to *burst*—the same root as our *tear*: *dālaya* (where *r* has passed into *l*) is found both in Sanskrit and in Latin *dēleo*, meaning ‘to cause to burst,’ or ‘to destroy.’ Sometimes, as you see, there is a change in the vowel of the root as well as a suffix; this is probably caused by the assimilating influence of the suffix. This vowel-change is what we regularly find in English in the formation of causal verbs, without any suffix left; yet we feel tolerably certain from the parallel forms of the verbs in Icelandic that this was their history. Thus we have ‘to *sit*,’ causal ‘to *set*,’ ‘to *lie*,’ causal ‘to *lay*.’ here the Anglo-Saxon *settan*, ‘to set,’ *læggan* ‘to lay,’

give us no help. But in Icelandic we find *setja* and *leggja* (*j* is pronounced in Icelandic as *y*), where the suffix does actually occur, and seems to have produced the vowel change. Again, these causal verbs take the later or 'weak' perfect-form (see Ch. V., 15); thus *lay* makes *laid*: but the simple verbs take the older 'strong' form; thus *lie* makes *lay*: this is another sign that the simple verbs are older than the causals.

13. This short sketch will have shown you what formative suffixes are in our family of speech—little syllables which have now no meaning of their own, whatever they may have had once. But **they can turn a root into a verb or a noun**: and then the personal suffixes can express the person acting through the verb; and the case-suffixes can show the relation in which the person or thing denoted by a noun stands to other persons or things. Of these inflectional suffixes we will speak presently. But what now are these roots to which the suffixes were added? They are not words, for we never find them used alone, except in those special cases in which *da* may mean *give!* as a command. In this respect they differ from those Chinese monosyllables which we spoke about before; because each of those can be used alone to express what we should call a substantive, or an adjective, or a verb. We know how we have got them: we have stripped off all the formative suffixes from several words alike in their general meaning, as *ag-o*, *ac tus*, *agmen*, &c. in Latin, and the residue, *ag*, we call a root.

14. Now this result is arrived at by a scientific process. We examine words as real things, and find some sound or combination of sounds common to all, as *ag*; and this we say represented the general idea of 'driving'; and other like forms give the idea of 'riding,' 'going,' 'giving,' or what not. But we cannot suppose that our primitive forefathers did this; we may be quite sure that they did not speculate about

the history of their words. Words to them were only means to an end, to convey their meaning to one another; and they would have been much puzzled if anybody could have talked to them of the roots of their speech. Our analysis ends with roots; and to us roots are the beginning of the speech of our race, the elements which admit of no further change. But they were not the beginnings to our forefathers; they were simply sounds admitting of change, increase, and diminution, representing general ideas; and about them could be clustered new words to represent the change of that idea, just as a verb such as *derive* may be a nucleus to us for *derivation*, and *derivative*, and *derivable*, and as many more as we want. But 'derive' came down to us, and we know its history; it meant to draw down a stream (*rivus* in Latin), and was first of all used only in the literal sense, then metaphorically; and we can trace *rivus* back to a root, *sru*, 'to run,' and that may have come from a simpler root, *sar*, and there we stop. We know nothing of the previous history of *sar*, neither did our fathers.

15. Here, then, is the difference between the two; we know all about *derive*, probably no one ever did know anything about *sar*. But there is no reason to suppose that *sar* is essentially different from *derive*, that it had no older form, or that many other words had not been formed from it, and died before the Indo-European period. Neither must we suppose that many other combinations of sounds, as well as *sar*, did not exist with much the same idea in the older time, and then died out, when, for some reason or other, *sar*, with all its derivatives, took people's fancy more. Depend upon it, there was a history of language in those days, which will never be written any more than the other history of prehistoric man. There is no new thing under the sun; the thing which is, that thing has also been. Speech grew and decayed then as now. You may fancy the earlier history of

our parent language as a countless number of lines all converging to one point, like the middle of an hour-glass, at what we call the Indo-European language; and then widening out again as before. Of the lower half of this hour-glass we know something—of the upper half nothing; and the narrow middle is a convenient place for examining its structure. But that is not the beginning of the hour-glass; and further, there is more than one hour-glass in the world at the same time. Just so roots are not the beginning of speech; also the roots of our family of speech are not the only roots in the world. **Roots are excellent labels to show that a lot of words form one class, and another lot a distinct class, and that the two classes mustn't be mixed; and woe to the etymologer who persists in mixing them. But roots are nothing more.**

16. You may have observed that **all the roots I have mentioned denote some action**—‘going,’ ‘giving,’ or the like—some operation which is regularly expressed by a verb. From these were formed nouns denoting some one of the properties of the thing; thus *dru* (a tree) was a ‘thing split,’ from the root *dar* (to split); *nau* or *nāvi* (a ship) was formed from a root *snā* or *snu* (to swim), and so on. We cannot indeed always connect the noun with its root; but there is little doubt that the general principle of formation of nouns was to describe them by some one property. There is, however, a class of words, pronouns and also some adverbs and conjunctions, which cannot be so explained; their meaning is too general to justify us in connecting them with any verbal root; and they must therefore be left to stand each by itself. They are sometimes called **pronominal roots**; as *i*, this, *ta*, that, *ma*, the base of the first personal pronoun, &c.

17. There is yet another method of forming nouns distinct from those we have described. This is called

composition—the joining together of base to base instead of suffix to base; and so making a new noun which combines the two ideas in some compound, the exact sense of which is to be made clear by the context. In languages where case suffixes have been lost, as our own, there is no distinction between the base and the noun in actual use; in these we may say that the compound consists of two or more nouns, *e.g.* *oak-tree*, *gospel* (good-spell), &c. Sometimes the second base does not exist apart from the compound, or a similar one, as in Latin *fidicen* = 'string-player,' *caeli-cola* = 'heaven-dweller;' but the last part of the compound in all these cases is clearly more than a mere suffix. It is essentially a base; *cola* is formed from root *col* with the suffix *a*; such words as *caelicola* must, therefore, be called compounds. If, instead of making these two words into one, we chose to use them separately, one of them would be in a certain case, or be used with a preposition (according to the nature of the language); thus *fidicen* would be *qui fidibus canit*, 'one who plays *with* the strings.' Therefore if we want to explain the syntactic nature of the compound, we should call it an instrumental-compound, *i.e.* one the first part of which stands to the second in the relation of an instrumental case. In the same way *arci-tenens* (bow-holder) will be an accusative compound, *viti-sator* (vine-planter) is a genitive compound, *caeli-cola* (heaven-dweller) a locative compound.

18. Often in our own language these compounds are so much corrupted that the two parts are not at first recognisable, *e.g.* *nostril* for *nose thirl*, = hole in the nose; *sheriff* for *shire-reeve*, *orchard* for *wort-yard* (literally 'root-enclosure'), now only used in a limited sense. Sometimes the first member has been syntactically an adjective; these may be called adjective-compounds, as *good-man*, *i.e.* a husband, *house-wife* (corrupted, alas! into *huzzy*), where *house* is used as

an adjective. Each of these two compounds conveys an idea complete in itself, *i.e.* they are substantives. But in English such compounds are almost always used as adjectives, *e.g.* *barefoot*, *snow-white*; they may then be called attributive compounds, and they require some noun with which to agree, as a 'snow-white hand;' except where the attribute is so distinctive as to become a proper name, *e.g.* Blackfoot, the name of an Indian tribe, or Barbarossa (red-beard), the nickname of the Emperor Frederick. Very often these compounds have a suffix attached, as *barefoot-ed*. Sometimes, but not very often, the last part of a compound is a verb, as Lat. *man-do* for *manu-do* = 'I put into the hand,' and our English *back-bite*, *white-wash*, &c. It is not an uncommon irregularity in the making of these compounds in inflectional languages that a case is used instead of a base for one member, generally the first, as *iuris-consultus*, *aquae-ductus*; and *pater-familias*, where the genitive stands last. This really means that two distinct words have become so associated together that they are pronounced without a break, and consequently written as one word. There are many of these in French, as *connétable* (constable) for *comes stabuli*, *Finisterre* for *finis-terrae*, *Montmartre* for the mount of martyrs. We have a few English words where the genitive, our sole surviving case, is similarly used, as *kins-man*, *dooms-day*, *colts-foot*, *dais-y* (day's eye).

19. In our European languages compounds are commonly made of but two words, to which, if they are to be further increased, suffixes only are added, as *light-heart*, *lightheart-ed*, *lighthearted-ness*, &c. The Sanskrit, however, was especially distinguished by its power of forming compounds of any length; and one of the greatest difficulties of the language lies in the finding out the exact relation of the different parts. Thus a Hindu could speak of a man as being 'tiger-king-hand-sword-killed' (a very moderate compound).

This would mean ‘killed *by* a sword *in* the hand *of* a king who was *like* a tiger.’ It is plain that such compounds must tax the ingenuity of those who wish to find out their syntax; and after all they must often be ambiguous, capable of expressing more relations than one, and this ambiguity prevailed even in short compounds. With us a compound like *horse-man* is definite enough; but to a Hindu it might mean a man on a horse, or a man like a horse, or (if declined in the dual) a horse and a man. The Indian compounds, however, are more expressive than ours, no doubt because the genius of the language breaks out in this way. Thus one name for a bird is *martānda*, which is literally the ‘child of a dead egg;’ a mountain is *a-chala*, a ‘non-mover,’ &c.

20. It may perhaps have struck you that these two ways of making words, the one by formative suffixes, and the other by composition, are not so different in their nature after all. This shows itself plainly enough from the English language. Thus we have seen that *ly* is called a suffix; it turns a noun to an adjective, as *God*, *godly*, *man*, *manly*; or an adjective to an adverb, as *truthful*, *truthfully*. But by tracing the word back we find that its older form was *lic*—and this is neither more nor less than our existing word *like*; and we can make compounds with *like*, as *god-like*, *man-like*. These do indeed differ in some degree in meaning from *godly* and *manly*. We call Odysseus (following Homer) *godlike*, but we don’t think of him as *godly*; but they point out that in form there is no fixed line to be drawn between the two methods, composition and derivation—that a member of a compound can become in time a suffix with no meaning except what use fixes for it: so much, that we can even say *likely*, *i.e.* *like* + *like*, without the least disquiet.

21. We can prove by many other suffixes, which were once independent words, that what we now call derivatives were once in reality compounds. Such are

thral-dom, *wis-dom*, *earl-dom*, from the Old English *dóm*, meaning judgment; it is used separately as *our doom*, but in the compounds it passes from its original meaning into the general sense of 'authority,' and so the sphere in which that authority is exercised. *God-head*, *maidenhead*, *manhood*, *childhood*, &c., are from the older form *hád*, a state, as we saw above (Ch. II., 7); when this word was lost, the meaning of the two parts of each compound was lost also, and the second part became a suffix. Yet you see a curious instance of the fondness of people for having some meaning at least apparent in the words they use, even though it be quite wrong; *hád* was altered into *head* and *hood*, each of which has a meaning, either alone or in some compounds. But neither of them has any meaning at all in such compounds as those of which we are speaking; only our ears are satisfied by the similitude of sense (see Ch. I., 44). In the same way *rick*, in *bishoprick*, is for *rice*, cp. German *reich*, power; *ship* in *friendship*, *lordship*, &c., is from *scipe*, or *scepe*, meaning *shape*, and so in these compounds the form or condition is expressed. The same word, differently pronounced, is heard in *landscape*, a shaping or drawing of land. These facts show how easily a compound can lose the identity of its parts, and how the subordinate part can slip into a suffix; and we have good reason for supposing that many other suffixes in other languages as well as English may have had a similar history.

22. These are the regular methods by which an inflecting language forms and constantly increases its stock of bases or words, wherever the two are practically the same thing, as with us. But beside these, words may be borrowed ready-made from another language. When some new thing is invented by one people and taken into use by another, it is of course most natural to take the name with the thing; though sometimes the word is simply translated, as when our *railroad* became *eisenbahn* in German, and *chemin de*

fer in French. The Romans borrowed from the Greeks—a more highly civilised race than themselves—most of their terms of art and science; these they borrowed of course in the base-form, and inflected after their own manner, e.g. they borrowed *poeta* (a base), and made the genitive *poetae*, not *poietou*, as in Greek. We unconsciously imitate the Romans in borrowing, though not inflecting, whenever we coin our new scientific terms out of Greek bases, as *proto-plasm*, and the like. Naturally these borrowed words are much more numerous in modern languages than in ancient. Our thoughts are widened by freer intercourse with foreign nations, and our vocabulary is enriched by commerce. We have incorporated words not merely from European nations—words without number from France, *sloop* and *yacht* from Holland, *flotilla*, *cigar*, and *mosquito* from Spanish, *stucco*, *portico*, and *balustrade*, from Italy—but even India has sent us, together with the thing itself, the name for *calico*, *chintz*, *rice*, and *sugar*; Persia has given us *chess*, *orange* (rightly *norange*), and *shawl*; *gingham* comes from Java, *tea*, *caddy*, and *nankeen* from China, *bantam* is Malay, *cocoa*, *potato*, and *tobacco* are American. There are many still older words borrowed from Arabic, among which those beginning with the article *al* are easily recognisable i.e. *alchemy*, *alembic* (Ch. I., 6), *almanac*, and *alcohol*.

CHAPTER V.

HOW WORDS ARE GOT READY FOR USE.

I. Now we have seen something of the formation of noun-bases and verb-bases—of elements, that is, which were not generally used as words in the earlier stages of the languages of our group, but which have frequently come to be thus used in the later analytic stage. But in the older stage of our languages something more was required before these bases were used

—something to show the relation in which one base stood to another. This want was supplied by the **inflectional suffixes**; and these we must now consider. You may see their importance from the fact that they have given a name to the group of 'inflectional' languages. We have but traces of them in English; but in languages like Sanskrit, Latin, and Greek they are all-important. First, then, we will take the **verb**, and see how the **personal-suffixes** arose; e.g. why *phē-mi* in Greek meant 'I say,' and then why *phē-sō* meant 'I will say;' this new form is really a new base, as we shall see, but the tense-forms cannot be conveniently treated till the personal suffixes have been described. Then we will pass to the **noun**, and trace out the history of those **case-suffixes**, which, when added to the base, expressed the different relations in which the person or thing denoted by the base could stand; how in Greece, for example, the base *oiko-* (a house), became *oiko-s* when the house was the subject of a sentence, as 'the house stands;' *oiko n*, when the object was to be denoted—'he builds a house;' *oiko-i*, to express 'in a house;' *oiko-then*, 'from a house;' *oiko-u*, 'of a house;' *oikō-i*, 'inclination towards a house,' with other meanings which attached themselves later. There were even more forms of this sort, as we shall see after we have discussed the verb-forms.

2. The commonest forms and probable meanings of the personal suffixes are as follows:—

	SINGULAR.	PLURAL.
First Person	-mi = I.....	-mas = we.
Second Person	-si = thou.....	-tas = ye.
Third Person	-ti = he.....	-nti = they.

Thus, from root *da* (to give), base *dada*, we get in Indo-European :

dada-mi = I give.		dada-mas = we give.
dada-si = thou givest.		dada-tas = ye give.
dada-ti = he gives.		dada-nti = they give.

3. Now it is in the nature of the case probable that the singular suffixes should, at least in their oldest forms, mean 'I,' 'thou,' 'he,' before they are attached to the verb; there is an obvious fitness in such a method of expressing the combined ideas 'I am,' 'thou art,' 'he is,' which goes some way to support any arguments which can be drawn from their forms. And those arguments are strong. It is true that *mi* and *ti* are not pronouns in separate use; but *ma* is the base of the first personal pronoun, and *ta* is one base of the demonstrative 'he;' and this slight weakening from *a* to *i* might naturally occur in a final syllable; *si* is not so near the base for 'thou,' which is *twa*; we know, however, that in some of the derived languages (as in Greek) *tu* in certain circumstances changes into *s*. Now it is very unsafe to argue from the phonetic changes found amongst one people at one time to those found at another time in another people. Each people develops its own peculiarities of speech. Thus we have seen that Englishmen of the present day dislike the guttural *gh* which our fathers liked; that Frenchmen dislike an *h* or a *w*; that the Greeks could sound neither *y* nor *v*, and therefore rejected both. But to argue, for example, that because one people drops the letter *v*, therefore it has been dropped in some particular word of another language in which *v* is regularly retained, is not safe reasoning. All that can be asserted is this: if we find a change of sound regularly established in one language, we allow it to be possible for another; but more than the usual evidence is necessary before we can regard as probable a derivation based on the

assumption of such a change; because for the second language the presumption is against the change; if it took place in the word which we are now considering, why did it not take place generally? Therefore this change of *twa* or *twi* into *si* in the parent-speech must be defended on the analogy of the first and third persons. If they represent the pronouns 'I' and 'he,' it is highly probable that 'si' should represent 'thou;' and the phonetic change is possible. We must also note that *ma* is the base from which all the cases of the first pronoun are formed except the nominative; but the nominative is quite distinct from the other cases; the oldest form is *agham*, whence the *ego* of the Greek and Latin, and the *ik* of the Gothic; which has shrunk into our *I*, through our dislike of final gutturals. But in every one of the cognate languages all the other cases are clearly derived from *ma*. This new form for the nominative must clearly have come into use when the distinction of the subject and object, specially important in the pronoun of the first person, was clearly felt. Therefore the use of *ma* to form the personal suffix carries us back to a time when the distinction was not felt to be sufficiently important to need different forms, and so the new nominative had not come into use.

4. The history of the plural forms is not equally clear; but there is reason, both from their form and from the analogy of the singular, to believe that they expressed 'we,' 'ye,' and 'they.' *Mas* has been ingeniously explained as equivalent to *ma* + *twa* = I and thou; *matwa* would pass through *matwi* into *masi*, a form which occurs in the Veda. Similarly *tas* can be explained as = thou and thou. The third person is very obscure; it differs from the singular only by the *n* before the *ti*; and *n* is sometimes used as a strengthening sound, e.g. in verbs like Latin *pango*, from root *pag*; it also occurs not unfrequently in neuters plural; but these throw no clear light upon

the verb; some etymologists think that it marks an inserted pronominal base *an*—so that *an + ti* should mean ‘he’ + ‘he’—two different forms with the same meaning, which I think unlikely.

5. These oldest forms have been exactly preserved in Sanskrit. The Latin has kept very near to them, as may be seen by anyone who looks at the verb ‘to be;’ *su-m, es, es-t, su-mus, es-tis, su-nt*. In English only fragments are now left: if we want to see the typical Teutonic forms, we must go to the Gothic, where we find *i-m, i-s, is-t, siyu-m, siyu-th, si-nd*, and the Old English forms are familiar to all students of our language; *com, eart* (where *r = s*), *is; syndon* stands for all persons in the plural. Our fathers used also another root with the same meaning, that which you see in Latin *fu-i*; this was originally *bhu*, and became quite regularly *fu* in Latin, and *bu* in Low German languages; this was conjugated *beom, bist, bith*; and *beoth* in the plural; instead of this *th, s* was used in the plural in the north of England, as we have already seen. It will of course be noted that the *m* of the first person singular was frequently dropped. In Greek the so-called ‘verbs in *mi*’ are few; and in Latin *inquam* and *sum* are the only presents so formed. In each language the present generally ended in *ō*, which was the final vowel of the base, and was lengthened by compensation (Ch. I. 38).

6. The verb was further distinguished in our group of languages by its capacity of expressing different times of action—present, past, and future. The present time could be expressed by the simple root with the personal suffixes, as *es-ti*, = he is; but generally the root was modified into a base.

(1) By being repeated (Reduplication), as in Greek *di-dō-mi*; probably to express that the action is a continuous one—not merely momentary; a distinction which in English we express by a

periphrasis, such as 'I am living' instead of 'I live;' almost the only instance of such reduplication in Teutonic is seen in the Gothic *gagga*, doubled from *ga*, to go; this yet survives in our north English *gang*. This method is certainly an old one, for it is found in some wide-spread verbs which denote simple ideas, like standing, going, giving, drinking, in both the European and the Asiatic languages. It is perhaps most important in Sanskrit; here it is regularly used to form what are called **intensive** and **desiderative** verbs, *i.e.* those which express doing a thing constantly, and wishing to do it; and then these were regarded in time as distinct verbs, and were conjugated throughout, not merely in the present, in this reduplicated form. Traces of these may be found in Greek and Latin, where they generally have a **causal** sense, *e.g.* Greek *bi-ba-o* = 'I make to go,' from root *ba*, 'to go,' *sīdo*, for *si-sedo*, I make to sit (root *sed*); cp. Ch. IV. 12.

(2) By having its **vowel augmented**, as in Greek *leip-o* (root *lip*), 'I am leaving,' or Gothic *greipa* (root *grip*), 'I am griping.' The long *i* (which has really the sound of *ai*) is the record in modern English of the change in this word, also in *shine*, *drive*, *smite*, *bite*, *rise*, &c. A great many of the changes of vowel in our present tenses are due to this principle; but our vowel system is so complex that we cannot enter further on the question. This change may have been caused by the same reason as the first one; but it may originally have been a phonetic one, produced by the vowel of the following syllable (cp. Ch. I. 31).

(3) By **inserting different suffixes** between the root and the personal suffixes—such as **na**, **nu**, **ta**, **ya**; the history of these is well known to all students of Greek and Latin; but it would take too much time to describe here. Sometimes an **n** (which *may* have been a suffix) is found in the middle of the root, as in *pango* (root *pag*) mentioned above; at all events

its effect is the same. This is seen in English *stand*, compared with the perfect *stood*. These suffixes are rare in Teutonic speech; traces are left in English of the suffix *ya* (see Ch. IV. 12); but the whole of the tenses of the verb were affected by it, not merely the present.

7. These different forms of the 'present base' look, as I have said, like attempts to carry out the **distinction**, which is a very important one, **between momentary and continuous action**. But to carry this out fully there ought to have been a present of each kind; one the simple root (with personal suffixes), to denote the momentary action; one the 'present base,' to express continued action. But no language, as a matter of fact, did carry this out in its conjugations; though several languages (ours, as we have seen), could express it by periphrases. The distinction is most marked in Greek, which has the aorist to distinguish momentary action, but only in the past tense. Yet this past tense is often used as a momentary present, in default of that form; and the continuous present is given by such phrases as *ekhō lexās* (literally 'I have, having told' = I keep telling). In *legō palai* = 'I tell (and have told) long ago,' the continuous present is further expressed by an adverb of time.

8. **Past time** could be expressed in the parent language in two ways, by the **Augment** and by **Reduplication**. The augment was a word consisting of the single letter *a*; this was changed to *e* in Greek. Its origin cannot be stated with any certainty; but it is probable that it was a demonstrative pronoun, meaning 'there;' 'I do a thing there' implies that I am not doing it here now, and so may come to express 'I did it.' In this case the vowel must probably have been originally long, an instrumental case of the pronoun; and there is no doubt that it was first used as a separate word, which by degrees coalesced with

the verb. Traces of the older use are to be seen in Greek, where it was inserted in compound verbs between the preposition and the root; it was often omitted altogether in Epic Greek. By means of this suffix two tenses were formed in the Indo-European language, which, in the forms that we have received, we call the **aorist** and the **imperfect**; their suffixes are shortened from those attached to form the present, and are sometimes called **secondary suffixes**; this will be easily seen:—

Primary Suffixes.

mi	si	ti		mas	tas	nti
----	----	----	--	-----	-----	-----

Secondary Suffixes.

<i>Original.</i>	m	s	t		{ mas	ta	an
					{ ma		
<i>Greek form.</i>	n	s	—		{ mes	te	n
					{ men		

9. The shortened suffixes are perhaps a compensation for the increase of the word by the augment. By the aorist was expressed momentary action in past time, as *e-lip-on domon* = 'I left a house.' Here we have, as we should expect, the simple root *lip*, denoting the mere action. The imperfect, on the contrary, was formed from the present base, and expressed continuous action in the past, as *domon e-leip-on* = 'I was leaving a house.' These examples are Greek; this language was the only one which has the distinction of meaning clearly developed. The Asiatic languages have both the forms; but the imperfect does not seem to be much more than an ordinary past tense. The Latin has no aorist, and its imperfect is a form peculiar to itself; but the imperfect and perfect are distinct in use. The Teutonic languages have neither aorist nor imperfect (except by periphrasis). We are not of course entitled to say that these two forms were first struck out to distinguish momentary from continuous action; they may have originated in

phonetic differences. But if so, this speaks even more for the subtle genius of the Greek race, that they alone consistently put the distinction to a good use.

10. It may perhaps surprise us that reduplication should be used not merely to express (as we have already seen in the present tense) continuous and repeated action, and desire for action, but also something more; for it was also used to express past action, and (in Greek at least) completed action in the past; thus *domon le-loip-a* could mean 'I have left a house once for all.' Yet this should not really surprise us; the needs of thought are many, the material of language comparatively small; and no one who is acquainted with the many different uses to which a single case of a pronoun (such as *that* in English, *hōs* in Greek, or *quo* in Latin) has often been put, will wonder at this use of reduplication, which, though a somewhat cumbrous, is a very natural method of intensifying the expression of a thought; and is extremely common in the languages of savage nations.

11. The perfect was formed by reduplication in Sanskrit, Zend, Greek, Latin, and specially in the Teutonic languages, which had no other simple method of expressing past time. In Sanskrit, Gothic, and Greek there is also a change of the root-vowel in the singular of some verbs. The nature of this is disputable; whether it was produced by phonetic causes, or whether it was intended to denote the completed action; at all events, it may have been used for that purpose, even though it arose otherwise. In Latin the reduplicated syllable has often been lost, as in *tuli*; sometimes, as in words like *cēpi* (root *cap*), we find a vowel change, which may be the result of a contraction of the two syllables. In Gothic we find sometimes an apparent intensification of the reduplicated syllable. Thus, from *haldan* (to *hold*), there is a perfect *hai-hald*; where, though the concluding consonants have been dropped, the vowel is certainly

strengthened ; the vowels of the two syllables are seen in the Old High-German *hialt*, and the Old English *heold*.

12 It should be noticed that this reduplicated 'perfect' is really present in *sense*. This you may easily perceive by the equivalents in our analytical language ; 'I have come' or 'I am come' are identical in meaning ; as the Athenians saw when they conjugated *εἰμι* (I am come) with the suffixes of the present tense ; and the Dorians had a whole class of such perfect-presents. We might therefore rightly enough call such perfects (as distinguished from the Teutonic perfects, which denote the momentary past as well) presents of the completed action ; and the past of that grade is to be found in the tense to which grammarians gave the mysterious title of the 'more than perfect.' But these were not generally formed immediately from the reduplicated root, they were 'compound' tenses, as we shall soon see. Yet there were a few simple pluperfects in old Greek, as *ε-με-μῆκ-ον* in the *Odyssey*. The completed action had also its future among the compound tenses. So Greek in this respect also was far richer than its sister languages. Latin, however, also had its future-perfect, as we shall see.

13. All these tenses which I have described are **simple tenses**, *i.e.* they are **formed directly from the root (unchanged or slightly modified) with the suffixes**, the only other element being the short vowel which commonly joins the two together. This is either the final vowel of a present base ; or, perhaps more commonly, it is the slight vowel sound necessary to make the compound easier when the root ends with a mute consonant ; thus it was not easy to say *reg-s*, *reg-t*, though there was no difficulty in saying *fer-s*, *fer-t*, or *vol-t*, or *es-t* ; and probably for this reason the Latins said *reg-i-s*, *reg-i-t*, where the 'binding vowel,' as it is sometimes called, makes

the words pronounceable, but adds nothing to the meaning.

14. Compound tenses insert some formative suffix between the root and the personal suffix, for the clearer expression of the time at which the thing is done. The original form of the future is an instance of this. The suffix was *ya*, which is found in various forms in all the divided languages except the Teutonic. It is supposed that this is short for *as-ya*; doubtful traces of the fuller form *as-ya* in Greek; *as-ya* would mean 'be-go,' and (*a*)*syāmi* (the formative and personal suffix together) 'I go to be.' You can make a future in English by saying, 'I am going to do it,' and one has heard 'I am going to go.' Another compound tense is a **second aorist** form (called unluckily the 'first' in Greek); this is supposed to be formed in like manner by adding a past tense of the verb to be, viz. *as-a*, though the only form which is found is *-sa*. This, like so many other tenses, is best developed in Sanskrit and Greek; but in Sanskrit, though there are several forms, their use is slight—at least in the classical period; in Greek there is but one form, if we except a few Homeric relics of another, such as *ik-son*, not *ik-sa* from root *ik*; each is a corruption from a supposed original *ik-sam(i)*. But this one compound Greek form is in constant use. It has not superseded the older simple form, and no verb has both in use together, except a few in which the new form has got a transitive sense, the older remaining intransitive. By our analysis this aorist meant originally 'I was to do.'

15. These tenses, whether simple or compound, existed before the parting of the languages, as they can be traced back to the primitive speech. They show strikingly the advance in grammatical expression which our forefathers had made. Many others were struck out by the different nations after their separation. Thus the Greeks formed

their **perfect** in 'ka,' erroneously distinguished in old grammars from the older form as 'active' from 'middle;' there is no such difference of meaning, but the compound form nearly superseded the old one; so did their **pluperfect**, which was formed from the reduplicated root by the same tense as the aorist *-sa*, but in the fuller form *-esa*; this became *-ea*, as we have it in Homer, *e-pe-poith-ea*: they also constructed **two passive aorists** and **two futures**, but, as in the active, each verb really used but one. They had also a **third passive future**—of the completed action—formed by adding the usual suffix to the perfect base; this future the grammarians dignified by the name of 'paulo-post.' The **Latins** formed their **perfects** in *si* and *ui*, their **pluperfect** in *-eram*, which is really identical with the Greek form as it stands for *esa-m(i)*; their **future** of the completed action, already mentioned, by adding *-so* to the perfect base: thus *cepero* = *cepi-so*, and also formations more specially their own, the **imperfect** in *-bam*, and the **future** in *-bo*. There is no reason to doubt that these are divergent forms of the present of the root *bhu* 'to be,' so that *amabam* by the help of the final *m* signified 'I was to love,' and *amabo* is 'I am to love;' the sense, therefore, is just the same as the Greek aorist and future, but the roots of the auxiliary verb are different.

16. More specially interesting to us is the formation of the **Teutonic perfect** in those verbs which do not use reduplication. Such verbs are commonly called in consequence **weak** verbs, as being obliged to use external help instead of expressing the idea by some modification of their own resources; **strong** verbs do this by reduplication or vowel change. These weak verbs add to the base the perfect of the verb 'to do;' this would be in Gothic *da*, and, reduplicated, *dada*, weakened to *dida*; this was further corrupted in the singular by the loss of the first syllable, but the

plural shows the original form very clearly ; thus from the root *lag* (to lay) we have the perfect :

Singular*lag-i-da*, *lag-i-des*, *lag-i-da*.

Plural.....*lag-i-dedum*, *lag-i-deduth*, *lag-i-dedun*.

We have of course corrupted much of this in English, more especially the plural, which certainly would not now tell the tale of its origin as the Gothic plural unmistakably does. Yet the second person singular has been preserved to us through the Anglo-Saxon in a fuller form than even the Gothic. Instead of *lag-i-des* we have *lai-dest* ; the *s* probably represents the second *d* of *ded*, which was changed into *s* before the *t* in a supposed earlier form *ded-ta* ; the Gothic made the same change, but let the *t* drop for euphony ; the English has no loss beyond the final vowel.

17. It will be seen that the general sense of these compound tenses is parallel to that of the formations of modern analytical languages. Thus *ama-bo*, 'I am to love,' is cognate to French *aimer-ai*, 'I have to love.' But there is a difference in the principle of the formation : in *ama-bo* the *bo* is added directly to the root ; it is technically an agglutinative compound, which has passed into an inflected word. But *aimer-ai* is made up of two actual words (see Ch. II. 2). Therefore, although the last syllable in this particular use has lost its meaning as fully as *bo* did, yet the whole word is a compound of a different period. It is, of course, open to any one to believe that *ama-bo* was at first *amare-fuo*, in which case it would be of the same class as *aimer-ai*. But there is no trace in grammar of such a lost syllable.

18. But there are other things about the verb which must be noted. We have seen how verbs have 'persons' and 'tenses,' the latter apparently formed by composition with other verbs of a general sense, 'to have' or 'to be,' which become mere auxiliaries, and are often incorporated into the main verb. But

verbs also have moods—a distinction found in all our languages, but very differently developed. A 'mood' is the 'mode' or manner in which an action may be regarded. These may be very many, and the oldest grammarians of Greece distinguished several, for which their language gave no special form of expression. But those for which there have been different forms in use are:—

19. (i) **The simple action**, done, doing, or to be done: to express which the root or base suffices, in the appropriate 'tense,' past, present, or future, and with the necessary suffixes to express the personality of the actor. This 'mode' is called the **Indicative**; the simple statement.

20. (ii) **The action, not simply stated, but brought immediately before some other person, commonly as a command or a request.** For this purpose personal suffixes may be used; but in the direct address to a second person the suffix is not needed for clearness, and is commonly dropped, or else reduced to the shortest possible form. This mood is the **Imperative**.

21. (iii) **The action not stated as a fact, though it may be one; but as a conception of the mind; for example as a wish, a condition not necessarily existent, but possible, a result or an object of some other action, &c.** This mood is called the **Subjunctive**. The name, as usual, denotes more especially one use of the mood; that in which the action is dependent upon another action, and not stated directly. But it is not necessary that it should be used so. The subjunctive may be used in a direct statement: e.g. 'quid dicam,' = 'what am I to be conceived of as saying?'—not 'am actually saying;' and this use is commonest in the older stages of a language, as may be seen plainly enough in Greek, by comparison of the Epic with the Attic syntax. It is not necessary that a language should have but one form for this

conceptual expression ; in Indo-European there were certainly two, traces of which survive in many of the derived languages.

22. It is in Greek that this double use has been most fully developed, and while the simpler form had the name 'hypotaktikē' (subjunctive), the other was called the 'euktikē', (optative). This second name arose from the fact that when used in Attic syntax (without the particle *an*) in a direct statement, it nearly always expressed a wish ; 'might this thing be so !' very much as we might say in English. But as I have already said of the subjunctive, in the earlier Greek the optative could be used in the direct statement of a conceivable thing, and there is no very apparent difference of meaning between the two moods when used together. Thus in the *Odyssey* we are told 'this is the way of Zeus-reared kings ; he may hate (subjunctive) one man out of mankind, one belike he might love (optative).' It does not appear that one alternative is regarded as being more probable than the other ; perhaps one statement is a little more vivid than the other ; but there is hardly more real difference between them than there is between the English equivalents. It has been suggested that, when the two moods are used consecutively in subordinate clauses, the optative expresses a more remote contingency ; in fact, that the optative stands to the subjunctive as the subjunctive does to the indicative ; this would have been very natural, and the primary use may have been of this sort ; but later usage contradicts as often as it supports the theory. It is certainly a fact that the optative is used to express the object or result of something already done ; whilst the subjunctive expresses those of something doing or about to be done ; and there is some connection in form between the tenses of the optative and the past tenses of the indicative. These facts are not at variance with the theory that the optative denotes a

more remote contingency than the subjunctive. But there is nothing in the forms of the moods, and nothing conclusive in their use, to prove that theory.

23. The suffixes by which their bases were formed from the present base of the verb were originally *a* for the subjunctive, *ya* for the optative. These are found in different forms in the derived languages. The Latin present subjunctive form is the same as that of the Greek; the imperfect subjunctive corresponds to the Greek optative; thus 'es-yā-mi' is the original of 'essēm, (es-iē-m) in Latin, and 'eiēn' (es-iē-n) in Greek. The rule in Latin respecting the tenses of the subjunctive in dependent sentences corresponds with the rule for the use of the moods in Greek. These are the chief points in the use of this 'conceptual' mood in its two forms; fuller explanation belongs to the special grammars of the two languages. There is nothing in the forms *a* and *ya* which serves to prove the original meaning of the moods; perhaps they were pronominal roots, like the *a* of the augment, but joined on after the base instead of before it. Some hold that they were verbs, and that *ya* meant 'to go.' This is less likely.

24. (iv) The so-called **infinitive** mood is historically no mood at all, being, as we shall see, really a case of a noun; sometimes a dative or locative, sometimes an accusative, as in Sanskrit. The Latin supine (whose use is nearly identical with the infinitive) is also an accusative.

25. Lastly, I must say a few words on the so-called **voices** of the verbs. We are all familiar with the difference between **active** and **passive** verbs; synthetic languages have special terminations for each, and the distinction seems to us a most elementary one. Yet it is tolerably certain that it grew out of another, and at first sight much less necessary one. In Greek the **passive** is to a great extent identical with another voice, which the Greek

grammarians conceived of as standing between the active and passive, and therefore called the **middle voice**. Now a comparison of Greek and Sanskrit leaves little room to doubt that the middle forms are the older, that they were formed to express **an action directed not towards another person, but the agent**; not 'I love another,' but 'I love myself.' This is one of the senses of the Greek middle verb, and the Sanskrit names for the two sets of forms, 'words for another' and 'words for myself,' curiously attest the fact. We should naturally expect those verbs, whose sense is specially reflexive, to be conjugated only in the middle voice; and some verbs are so conjugated both in Sanskrit and in Greek, sometimes without any very apparent reason. There is no great agreement between the two languages in this respect: thus *labh* (to take) is declined only in the middle in Sanskrit, but the sense is quite that of an active verb; in Greek, *lambano*, the active is as common as the middle, and the difference of sense is generally marked; but such distinctions are not likely to be made always the same by different peoples. The Greek language is remarkable for the skill with which slightly different shades of meaning can be marked by this voice.

26. Then, when the middle voice had given an expression for 'being acted upon,' though only by oneself, it was natural to utilise the same form for the more common kind of being acted upon, viz., by another. This was done regularly in Greek; the same forms served for middle or passive use; but a considerable number of compound forms was afterwards added specially to each voice. In Latin the middle was converted into the passive, the original sense passing away; but the older use remained very distinct in a number of verbs which did not become passive at all: such as *vescor* (I feed myself), *utor* (I employ myself), *reminiscor* (I call back to my mind),

and many other common verbs which the grammarians unluckily called 'deponents,' in the mistaken notion that they 'laid down' that passive sense which, as a fact, they never had, being really reflexive verbs from the beginning. In Sanskrit the passive was a new base formed by the suffix *ya*; the meaning of this is doubtful; the common explanation that it is the root 'to go,' (so that, for example, *labh-ya-te* should get to mean 'is taken,' through 'take-go-it-itself') does not greatly commend itself; be this as it may, to this new base the suffixes of the reflexive voice were then added. In form these suffixes correspond closely in Sanskrit and in Greek; they are (omitting the duals)

° *Primary.*

Sanskrit..		i	sē	tē		mahē	dhwē	ntē
Greek.....		mai	sai	tai		metha	sthe	ntai

Secondary.

Sanskrit..		i	thās	ta		mahi	dhwam	nta
Greek.....		mēn	so	to		metha	sthe	nto

27. The Greek has preserved the oldest attainable forms for the singular in **mai**, **sai**, **tai**: and that they are modified in some principle from the active **mi**, **si**, **ti**, is clear enough. But it is not easy to see how. One supposition that **mai** = 'ma + mi,' so that the pronoun is doubled to express the reflexive action, is not a bad one: and it is supported by the secondary form **mēn** which points to original **mam**. It is also possible that the difference in meaning was at first conveyed merely by lengthening the vowel, so that 'mī' became 'mī,' then by the general tendency of long vowels to become diphthongs *ī* (ee-sound) may have passed into *ai*: compare our possessive pronoun, now written *mine* (pronounced *main*), but originally written *mīn*, and pronounced *meen*.

28. The Latin (with which the Keltic agrees very remarkably) attained the same result in a very different way. It simply added the reflexive pronoun *se* to the active verb: thus *amat se* is 'he loves self;' the two words (joined with a connecting vowel) became *amātuse*, by loss of the final vowel *amatus*, and, by change of *s* into *r*, *amatur*; just as *arbo*s passed into *arbor*, and many others likewise. 'This same 'se,' in the form *s* or *r*, was then used for other persons as well, conveying the general idea 'self,' and so *amo* became *amor*, *amas* became *amas-i-s* or *amaris*, &c. This explanation of the Latin forms is rendered fairly certain by the fact that in Lithuanian the same process is found, but the pronoun has not become permanently fixed to the end of the verb but is sometimes used between it and a prefix: as though you could say in Latin *trans-se-veho* in the sense of and instead of *transveho-r*.

The Icelandic reflexive verbs also throw light on this formation. These verbs take the suffix *-sk* short for *sik* (= oneself) and *-mk*, only used in the first person, for *mik* (= me): thus *elska* = I love; *thau elska-sk* 'they love one another;' *ek thykkir* and *ek ihykkju-mk* both mean 'I seem.' So too the O. E. *busk* (Icel. *by-sk*) is to make oneself ready; remember the old song,

"Busk ye, busk ye, my bonnie bonnie bride,"

and to 'bask' is either to 'bathe self' or to 'bake self.'

29. We have thus seen something of the curious and complex machinery by which the verb has been built up in one family of languages. We have next to consider the formation of the noun: how the base could be so modified as to make the important distinction between the subject and the object of an action, and to express some at least of the circumstances under which an action is performed. In the

earliest stages of the languages which we are describing, we find the suffix *m* mostly used to indicate the object ; or, if we use the terminology of grammar, to form the **accusative** case ; sometimes however in neuter nouns the base alone was used. The **nominative** case was marked by *s*, when the agent was masculine, and sometimes also in feminine nouns ; but more commonly these were expressed by different bases which perhaps had no special case-suffix ; in neuter nouns the form was the same as that of the accusative. This variation in use makes it probable that the suffixes were not first employed to express the relation of subject and object : nay, the absence of any suffix in some nouns seems to point back to an earlier usage when bases alone were used without any case-sign, as in modern English ; and the order of the words, or the general sense of the passage, was the only method of showing which was subject, which was object. It is likely that the *m* was first of all a pronoun added to the noun to emphasise it ; just as you may hear in every day unlettered speech ; ‘so John, he says to me ;’ that indeed is a nominative, and is more exactly parallel to the *s* of ‘*Gaiu-s*’ &c., but the principle is the same in both, for this *s* was probably the pronoun ‘he,’ and marked the masculine gender ; so that *Gaiu-s* is just ‘John-he.’ Then by the play of fancy gender was attributed to many a thing which had no life ; as by sailors to their ships in our own English ; and other nouns were declined as feminines because of similarity of termination, and for other causes not easy to determine.

30. We may see here that **gender is no natural distinction in language** : feminine nouns were originally nothing but a class of nouns with a different termination, in fact a special base : whereas masculine and neuter nouns were formed from one common base, and differ only in the nominatives, and in the plural nominatives and accusatives. So, if we

decline, *bonus*, *bona*, *bonum*, we must remember that *bona* is not an inflection of the masculine base, as *boni* the genitive is; there is a base *bono* from which is formed the masc. *bonus* (originally *bono-s*) and the neuter *bonum* (*bono-m*); and another distinct base *bonā* from which the nom. *bonā* is shortened, and *bonae* (*bonā-i*) is formed: and this by use became restricted to goodness in a woman.

31. The first meaning then of the nominative and the accusative was probably quite vague; and it is not likely that they were invented to meet any logical want. But whatever their origin was, there is no doubt that **they were early used to express that distinction in thought which we call subject and object.** Sometimes indeed they are called the subjective and objective cases: and as mere names these would do just as well as any others to distinguish the different forms. But as we have seen, it must not be supposed that the forms are necessarily identical with these uses, if only because one form—that in *-m* can be used for both, e.g. ‘*monstrum incolit antrum.*’ It is very likely that **these two cases, with the vocative** (which, as we have already said, is the mere base, used in calling on a person but not putting him into any relation with anything else), **were older than the other cases:** first, because they were the most necessary; secondly, because they are found in all the Aryan languages, whereas other cases are only found in some; thirdly, because they never interchange in form with any of the others.

32. It is not easy to say which of the other cases came next in time; if we may infer (1) from the extent to which they occur in the different languages and (2) from the amount of agreement in their use, we should place the **genitive**; which had originally two forms, as (cp. Latin *ei-us*) and *sya* (cp. Sanskrit *çiva-sya*); the nearest form in Greek is seen in *dēmo-io*. The origin of neither of these forms is known: the latter

one is very like an adjective-base ; whence it has been conjectured that these are identical ; but no proof of this seems possible, though the uses are very parallel. In some languages, the relative pronoun can be used to denote the same idea ; thus, 'the house which the man' is equivalent to 'the house of the man ;' and if the element denoting 'which' were added to 'man' this would be a strict 'case' in our sense of the word. But though these (and others) are actual methods in which the genitive relation has been expressed, we must not conclude that these particular suffixes *as* and *sya* are necessarily to be so derived. The simplest use of the genitive is to express **any kind of relation between itself and another noun**, as 'John's house,' 'man of the town.' This general sense can be subdivided into a great many special and seemingly opposite uses : thus *timor Romanorum* in Latin can mean the fear of the Romans felt by somebody else, or the fear of somebody else felt by the Romans : and these two uses are very properly classed in grammars respectively as the objective and the subjective use of the genitive ; because you might state them as (1) 'aliquis timet Romanos' some one fears the Romans (object), or (2) 'Romani timent aliquem' the Romans (subject) fear some one : but neither of these meanings is really inherent in the genitive itself ; each is infused into the genitive by the intelligence of the hearer.

33. There are several other uses of this case which are very old because they are found in every language ; as the partitive use, e.g. 'many of the Greeks,' where again the genitive does not express the part ; it only implies *some* relation between 'the Greeks' and 'many ;' and the mind supplies the necessary link ; the possessive use, as in 'John's book' whence the case is sometimes called the possessive case in English grammar ; which must not blind us to the fact that possession is only *one* meaning of the case and

that a derived one. In some languages, more especially in Greek, **this case is also used with verbs**—principally verbs which express touching a thing or aiming at it; but these uses are secondary, and in Greek probably arise partly from the loss of other cases, in consequence of which the genitive was obliged to do other work as well as its own. In some instances the genitive seems to be used when the verb expresses taking or perceiving only certain parts or qualities of a thing, not the whole thing; so that it is the same in principle as when the genitive with a noun expresses the thing of which a part is taken. Generally speaking the genitive is to a noun what an accusative is to a verb; it defines further the meaning of the word to which it is joined. Obviously, as was said above, this use is much like that of an adjective: it does not differ whether you say ‘hostium metus’ or ‘hostilis metus;’ though a further meaning may often attach to the adjectival phrase, *e.g.* ‘feline spite’ would generally be used of some one else than the cat itself.

34. Perhaps the next two cases which sprung up were the **locative** and the **dative**: they are much alike in form, the locative suffix being *i*, the dative *ai*: and they have become mixed up in some languages, especially in Greek; indeed in all Greek nouns whose base ends with a consonant, or in *i* or *u*, what we call the dative is really the locative; *e.g.* *paid-i* (base *paid-*) *ichthu-i* (base *ichthu-*). This pair of cases, or the traces of them, are found in more languages than the other cases, if we except the four already mentioned: which is an argument for their greater age: and there is more agreement both in their form and use. There is no doubt that the original meaning of the locative was ‘**in a place**;’ and this gives some colour to the conjecture that the suffix *i* was originally the preposition *in* (found in Latin), so that *oiko-i*, and *dom-i* meant originally ‘house-in.’ But the prepositions were themselves, generally, cases of nouns, as we shall presently

see : so that we should be arguing in a circle if we called a preposition a case of a noun, and then explained a case as formed from the preposition. Some late case-suffixes indeed might be prepositions which were themselves other and older cases. But the locative is too old a case to be explained in this way. Again, if we look at languages like the Chinese which join one whole word on to another whole word to express by such post-position what we express by cases, we should infer that the *i* here was more likely to be the remainder of some word meaning 'middle,' 'interior' or the like, or that it was the fag end of a verb denoting 'being ;' but of such a verb there is no trace. The question cannot be answered with any kind of certainty.

35. The dative looks not unlike a modification of the locative form : and some of the dative uses might not unnaturally be explained from the earlier notion of the place in which : e.g. the notion 'to a person' might be explained as putting a thing into the hand or power of that person. By a contrary process we commonly substitute the locative for the dative, when we say, 'where (locative) are you going ?' instead of 'whither' or 'to what place.' This may serve to show the close connection of the two cases. But an ultimate analysis seems to point to **bodily inclination towards an object** as the primary meaning of the dative ; which would therefore not be borrowed from the locative. The regular use of the locative is to express (1) the **place** and (2) the **time** in which a thing takes place. It is only in Sanskrit that its sphere has been extended. The initial meaning of the dative shows its adaptability for the uses to which it was regularly put—viz. (1) to express the person or thing affected by an action, but not so directly as another person or thing ; and called in grammar the '**remoter object** : ' as when I say 'I give a crown,' an idea which is incomplete unless I add 'to some

one : ' (2) to express the **person interested** in the fact stated in the sentence ; just as we might say in English ' He is welcome, for me.' The verbs with which the dative is found in the first use are much the same in all languages : they express such ideas as ' bending ' ' inclining ' ' giving,' ' showing ' ' speaking ' ' being angry ' or ' well disposed : ' and you may see how all these imply some bodily (or mental) inclination, but not motion towards a thing. The second class contains the well-known Latin use which has the mysterious name of the ethical dative ; as in ' *quid mihi Celsus agit*,' ' I wish to know how Celsus is : ' where *mihi* expresses the ' feeling,' (Greek *ēthos*) not the morality, (as ' ethical ' now suggests to us) of the speaker. No exact line can be drawn between the two uses ; they shade into each other ; but roughly speaking, in the first the dative is necessary to complete the idea ; yet not always. We say in Latin ' *irascor tibi* ' = I am angry with you ; but we say also simply ' *irascor* ' = I am angry : in the second use the sentence would stand entire without the dative.

36. The uses of the dative are best studied in the Latin ; in no language have they remained more unmixed with those of other cases ; the Greek dative in this respect is a great contrast, as it has had the locative incorporated with it, and the functions of the instrumental forced upon it. One well known Latin use of the dative is to express the **purpose of an action** that ' towards ' which you look in doing it : *e.g.* in ' *receptui canit*,' the retreat is the purpose of the signal : and akin to this is the use of the dative, mainly with ' *est*,' denoting a **result**, as ' *exitio est mare nautis*.' Now both these usages are found in the old Sanskrit of the Vedas : in later Sanskrit the dative is little used except for the " purpose," its more obvious duties having fallen to other cases. No other language has developed these last uses which we find in Sanskrit and Latin ; it is quite sure that the Hindus did not

borrow them from the Romans, nor the Romans from the Hindus; so **this coincidence curiously shows the great antiquity of parts of our syntax**; for this usage must in all probability have been known before the parting of the Asiatic and European members of our family. In Sanskrit, the ordinary uses of the dative have been taken by the genitive, as the remoter object, and others: or by the locative, which in classical Sanskrit may also express the manner of an action, a use properly belonging to the instrumental.

37. This exchange of uses is instructive; cases must necessarily get uses not their own, when other cases are lost, and leave work for the survivors to do; and such loss occurred in all the European languages, particularly in the Greek and in the Teutonic group. But there may be confusion even without this loss. All the cases remained in the Sanskrit; yet their meanings are greatly interchanged; but their forms are not so much alike as to cause confusion; indeed forms may be identical and yet distinguished sufficiently in use, as the dative and ablative in Latin. But even without identity of form, the general similarity of sense may cause the change of use: it may also arise from desire for variety of expression, as I shall point out later.

38. An interesting use of the dative (and sometimes of the locative and accusative) is that which we call quite wrongly the **infinitive mood**. Grammarians battled long over this strange form, but eventually it was given to the verb. This, however, was wrong. Scientific etymology has shown that the infinitive was a case of a noun, expressing, as the dative can express, the object of the action. I have not room to go through the proofs of this, and show that all the Greek and Latin infinitives were cases; as *regere*, of an obsolete noun *reges*, meaning 'governing'; or *dounai*, of a noun *dāvana* (= the act of 'giving')

which is actually used in the Vedas in the dative *dāvanē* = to give. Literally, then, a person is said to be 'toward the act of giving.' The English preposition shows that our infinitive 'to give' is only the analytical equivalent of a dative, just as in Latin you could say 'ad dandum' instead of 'dare;' and one is as much a case as the other. Indeed, the older English form ended in *-en* or *-an*. You would find *given* or *waiten* in Chaucer; and if you went back to Anglo-Saxon you might find a veritable dative *gifanne*. This infinitive was sometimes (in the fifteenth century) wrongly spelt with the termination *ing* or *inge*, and so became not easy to distinguish from the nouns which end in *ing* (original *ung*, as *huntung* afterwards *hunting*), or from the present participles, as *huntende*, also corrupted into *hunting*. This confusion may have given currency to the common use of the infinitive with us as the subject of a sentence, e.g. 'to err is human.' This use was developed independently in Latin, as 'errare est humanum,' and still more in Greek, where the infinitive can be regularly declined with the article as an independent base, though without suffixes.

39. Next to this couple of cases may have come the **ablative**, of which the primary meaning was unquestionably **from a place**. But we find traces of more than one form used to express this idea, viz. *as* (the same as one genitive form) and *at*, probably also *dhas*, for traces of this are found in both Sanskrit and Greek. There is a form *tus* in Latin, as *caelitus*, from heaven. The commonest form, however, in Latin was that in *at*, changed into *d*, as *caelod*. In very early times the *d* was dropped in most words, but it is found not uncommonly upon inscriptions. The only trace of this form in Greek is found in some adverbs, ending in *ōs* or *ō*; e.g. *houtōs* or *houtō*: but the *dhas* form is found as *then*, in *oiko-then*, &c. It had passed out of all the Teutonic languages before

they had any literature ; it is possible, indeed, that no such case existed in them. It is improbable that the need for this case was felt long before the separation of the languages. If it had been, we should have had some one paramount form traceable in all or nearly all of them, as we do find in the other and older cases. Yet the antiquity of the case is shown by the same form occurring in Zend and Latin, and another in Sanskrit and in Greek ; such coincidences cannot be accidental.

40. The first conception of motion from a place was naturally extended ; the case came also to denote **origin**—that from which a person or thing was produced, the cause from which a thing arose, &c. In Latin it also denoted the **instrument** (being the nearest in sense to the lost instrumental case) by which something was done ; then it marked the agent, the living instrument of the action. But the distinction was felt, and was as a rule denoted by *ab* for the agent. Yet proper names were still occasionally used without *ab*, where the instrumentality was all that needed to be expressed, *e.g.* when Horace writes to Augustus ‘*Scriberis Vario*,’ Varius shall be the instrument to tell of thee. Next it denoted the **manner** of the action ; between the manner and the instrument it is often impossible to draw a distinct line. These instrumental uses are by far the commonest, for ‘motion from’ in Latin was generally further denoted by a preposition. In classical Sanskrit there is the same loss of the original force ; we generally find a periphrasis, such as ‘having left a place,’ instead of the simple form ‘from a place.’ Perhaps the most striking derived use of the case (and one found before the parting of the languages) is the expression of **comparison**. Thus ‘*melior patre(d)*’ in Latin is literally ‘better starting from his father,’ who is thus the starting-point or standard. This same use is found in Sanskrit, and also in Greek, as ‘*kreissōn*

emethen, 'better than me;' but this in ordinary Greek would be *emou* the genitive: that case took most of the functions of the lost ablative. The confusion between the two cases arises partly perhaps from the identity of one form for each (*-as*); but much more from the close approximation of some of the usages, *e.g.* the partitive. 'Many of the Greeks' may be regarded as 'many taken out of the Greeks;' it may also be looked on as a true genitive usage, as we have already explained it. Indeed our English preposition *of*, which we now call the mark of the genitive case, is nothing but the equivalent of the Latin *ab*, and this points rather to an ablative origin; in Anglo-Saxon it is followed by a dative, with which the ablative has coalesced. Little distinction of sense now remains in English between this analytical form and the true genitive case in *s*.

41. Last come two suffixes, *ā* and *bhi*, which are the marks of that which is commonly called the **instrumental** case. What was said of the ablative forms is still more true of these; they are still less common in the different languages, and their meaning is much less definite, *e.g.*, *bhi* only occurs in the plural in Sanskrit, with the further suffix *s*; and it is also used with another suffix *-as*, to express both the dative and ablative. In Latin it occurs in but few words—*tibi* and *sibi*, where it appears as a dative, *ibi* and *ubi*, which are locatives at least in use; in epic Greek it is found, but the distinctive meaning was early lost, and though when used alone it generally expresses the means whereby we accomplish an action, *e.g.* *biē-phi*, 'with strength,' yet it is also used with prepositions in senses not distinguishable from the ablative, genitive or dative. The *ā*-form is found regularly in Sanskrit, but in other languages can be only traced through a few adverbs. In Greek we have *hama*, *tacha*, and others; and in Old English we find *forthi* and *forhwī*, in which *thi* and *hwī* are instrumentals of *the* and *who*.

Thus in the old version of the 100th Psalm you may read (though often wrongly printed as two words, and as a question),

forhow "Forwhy (*i.e.* because) the Lord our God is good."

42. There is some trace of difference of meaning in this case. It could express the person 'with' whom you go (in which sense the case is sometimes called the **sociative**), and also the instrument 'with' which you do something (the pure **instrumental**); and if there had been more time, the two suffixes might have been apportioned to these different usages. But, indeed, these shade into each other. 'To go with a man' is certainly sociative, 'to strike with the sword' is certainly instrumental; but 'to go with a ship' or 'with a car' (*nauphi* and *ochesphi* in Greek) lie near the border, and 'with a horse' is quite upon the boundary line. As you see, the English *with* does fairly well for all. It was formerly used with the instrumental; as 'with thy' = provided that.

43. In Latin the work of this lost case was done by the ablative, with which (as we saw) it fairly suited. There is little doubt that the so called **ablative of description** ('*vir magno corpore*' = a man with a big body), is really of this kind; the **instrumental** is used just so in Lithuanian. This language has kept the primary double usage very clearly; it has also some peculiar uses, as a cognate instrumental, just like the accusative in Greek and Latin, and a predicative use with verbs of being; compare the Latin dative. In Sanskrit also the use of this case is very great; it denotes the agent (for which both Greek and Latin need a preposition) quite as often as the instrumental, together with all those uses which are covered by the Latin ablative sole.

44. I have spoken at such length of these cases in the singular, that I have no space to dwell on the **plural forms**. These are not so simple as

the singular forms, of which in general they seem to be modifications, made by adding the mark of plurality -s, the history of which is very doubtful. The dual forms are apparently later modifications of the plural: duality is only one rather noteworthy instance of plurality. There are not so many distinct forms in the plural. The dative and ablative are not distinguished; in the dual the instrumental goes with these, and the genitive coalesces with the locative. This is hard to explain, and the unions are strange; but probably there was less need of these cases to express plurality. So many things are more common in the singular than the plural, and many have no plural; the dual, too, was but little used even by those languages which possessed it.

45. This shows all the better the fact, which appeared to some extent in the singular, that **there was no definite number of cases**—no number just sufficient to express certain logical ideas. Such an idea has been held even in this century; it was natural to a student of one or two languages only, especially of subtly constructed languages, such as Greek and (to a less degree) Latin, to suppose that just those cases which he found there formed the natural and necessary number to express those shades of thought which they did express so admirably. Indeed it was even supposed that the Greek language gave the typical number, and that the ablative was an irregular and not wholly commendable addition of the Romans. This is not the way in which languages spring up and grow. These forms were used at first without much precision; then by degrees as distinctions in thought accumulated, the forms of language were defined to express them, but rarely so exactly as not to allow two or three ways to remain for saying the same thing.

46. You may easily see this in the use of the cases. We can say 'to slay with the sword' or 'to

be slain by the sword,' according as you regard the sword as that by which a man is accompanied, or the instrument of striking; and the one suits the active a little better, the other the passive. We can say in Latin 'potiri harenā,' or 'potiri harenæ,' according as you phrase it 'to enrich yourself with the sand' (instrumental-ablative), or 'to be lords of the sand,' where the substantive idea is strong in the verb, and therefore it likes the genitive better. You can express the price or value of a thing in many different ways—by the instrumental (Sanskrit), as that sum by means of which you buy it; by the locative (Latin, 'magni,' 'tanti,' &c.), as the point in an imaginary scale at which the article stands; by the ablative in Latin, but probably only as the representative of the instrumental; by the genitive (Greek and Lithuanian) denoting simply the relation between the thing and the money, which in English we might show by a compound like a 'five-pound-book.' The moment of time at which a thing takes place is expressed in Sanskrit by an instrumental or a locative, in Latin by an ablative, in Greek by a dative, in Lithuanian by a locative. Possibly the locative may be the original case in Greek and Latin, and the others may only represent it. Yet it would be rash to say that the instrumental and ablative could not themselves have borne from the beginning the meaning which, at all events to those who used them, they seemed naturally to bear.

47. As a last example, take the **absolute construction**, as it is called, when a clause of the main sentence is not joined to it by any bond—conjunction, or other—but exists beside it 'freed from' any fetter (*apolytos*, in Latin *absolutus*). We generally meet this construction first in our Latin Grammar, where the ablative is the case so used; it is probably an ablative of the manner, or of the circumstances under which something else happens, and so might be called an instrumental ablative. But, be this as it may, the

ablative henceforward seems to us the one natural case to be 'absolute;' and when we find a genitive absolute in Greek we conclude that this is one of the many instances where the genitive has slipped into the shoes of the lost ablative. It may be so, but not necessarily. Look at other languages. In Sanskrit we find the locative regularly so used, sometimes the genitive, rarely the ablative. The dative is used in Lithuanian, as sometimes in Greek; and it was apparently also found in Old English—'they have stolen him, us slepinge,' in Wickliffe;' but we should now say, 'we sleeping,' just as a nominative is sometimes used in Greek. Now what are we to say to all this diversity? Clearly there is no one proper case to be used absolutely; different cases can be used to express the circumstances of the main action, according to the fancy of the speaker. The only use which must be called ungrammatical is that of the nominative.

48. These illustrations may show you **how freely the cases can be used**, even in the same language. This freedom seems somewhat strange to us in learning a language. It seems that it would be much more natural that all people should express the same idea in the same form. In reality variety is natural. But I hope that you see that (as with everything in language) there is a reason for the variety; and will not suppose that some unpleasant persons—possibly grammarians—laid down arbitrary laws to puzzle learners. We must except from the variations arising from the natural love of variety those which are due to mere confusion, *e.g.* in Latin the expression of place sometimes by a genitive (as *Corinthi*), sometimes an ablative (*Athenis*), the truth being that one is a locative singular, the other a locative plural; but they were confounded with the genitive and ablative, because the forms had become identical.

49. It is impossible to explain why these case-suffixes had the meanings which have been here

attributed to them. We can give guesses at the nominative and accusative, and perhaps at the genitive, principally because here we have the analogy of other families of language to show us how similar forms have been produced. Such evidence of course is not cogent. Because a certain principle is found in one family, it does not follow that it must have acted in another; and from the nature of the case we have no parallel forms in our own family with which to compare them. They are themselves the ultimate and sole results of our analysis. Therefore although it is vexatious to be stopped just when we seem to be on the point of learning all that we wish to know, yet the safe plan is to confess our ignorance, and acquiesce in having reached the limits of the knowable.

50. It may not be uninteresting to explain very briefly what these familiar terms mean. *Case*, *nominative*, *accusative*, &c., are all terms familiar to us for many a day; but they are not intelligible in themselves. How did they come to us, and what did they all mean? *Casus* is the translation made at Rome of Greek *ptōsis*, a word which first appears in Aristotle. It meant 'a falling,' a variation from the primary form, whether of noun or verb. It was first restricted to nouns by the Stoics, who gave the names *genikē* (genitive), *aitiatikē* (accusative), *dotikē* (dative). The nominative they called *orthē*, or *eutheia*; by the first name they meant 'active,' the case which denotes the agent, the opposite term being *hyptiā*, that is, 'thrown,' a term borrowed from wrestling. The corresponding Latin term ('passive') is still retained in grammar for the voice which expresses how a person or thing is acted upon. *Eutheia* means 'straight,' as opposed to cases which were *plagiai*, i.e. 'slanting' from the nominative, or upright, case. But when the Stoics used the term *ptōsis* of the nominative, the Peripatetics objected, and told the Stoics that by their own showing the nominative was no 'case.' The

Stoics therefore gave a false derivation to the term, and said that it meant a 'falling away' from the mental conception into the intelligible representation. This suited their conception of names as realities, which forbade them to separate the nominative from the other cases, and explains why they refused 'ptōsis' to verbs which expressed accidental relations only.

51. The Latin **nominative** is a translation of *onomastikē*, the 'naming' case. It is a bad title, because the nominative does not merely name, but expresses that a thing is in a particular relation. *Genikē* meant the 'class-case;' in such a statement as 'of good things some are mine,' the genitive denotes the genus, of which mine are a species. Clearly this is one use only of the genitive, and not the most common; but it is the one which struck the man who first invented the name. The name **genitivus** is the fault of the Latin translator. Just as *genikē* denotes one use only of the case, *dotike* denotes but one use of the **dative**—that of giving—though a very obvious one. Strictly, however, the word describes a case which denotes that person to whom some one else is a giver. In the same way *aitiatike* may express that person or thing to which some one else is an *aitiā*, or 'cause'—that is the case of the object as opposed to the subject. But this is uncertain, and the Latin **accusativus** gives us no help. **Ablative** was a Latin name from the beginning; the Greeks did not want it; the name expresses the use well enough. The other terms explain themselves.

CHAPTER VI.

THE PARTS OF SPEECH.

1. WE have thus seen how verbs got and used their 'persons' and 'tenses,' and how nouns got and

used their 'cases.' But is the whole stock of grammar comprised in the noun and the verb? Are there not other "**Parts of Speech**" as important as these? Not so important certainly. The '**noun**' (*onoma*), or 'name,' and the '**verb**' (*rhema*), or 'predicate'—for this is what the word first meant, though it was soon restricted to the verb as being either the whole or the most important part of the predicate—these suffice to express all a man has to say, though some additions may enable him to say it more gracefully. We have seen that the simple verb and the nominative and accusative cases furnish him with the means of distinguishing subject, object, and predicate, the primary needs of thought. What is next required is some means of expressing the **circumstances of action**; the time in which, or the space through which, or the instrument with which it is done; the cause of it, the purpose of it, and the result of it. **These and the like can be set forth by means of the 'cases'** already described.

2. We can test very fairly the measure in which a language has preserved its ancient character by the use of the cases; and so judged, no European languages are so primitive in their syntax as the Latin and the Lithuanian. In Latin the genitive and dative have preserved without development, and with little accretion, the original uses of those cases as I have described them; the ablative, indeed, has been augmented by the instrumental and partly by the locative, but the lines can be drawn pretty clearly. In Sanskrit we must distinguish two periods, that of the Vedas, and the classical period—that of the Epics and Dramas. In the first of these we find the cases in clear and regular use. In the classical time we find compounds (see Ch. IV., 19), which render cases unnecessary, and even verbs to a great extent; yet the cases are used, though not nearly so much as in the synthetic

European languages. But they are used, as might be expected, with much confusion; the dative is almost starved out, the genitive is little more frequent, and then occurs mostly with verbs. The ablative keeps its proper place, but the locative has been enormously expanded, so as to express not only the place 'in which,' but also the person ('I will dwell in thee'): it is frequently used for the indirect object ('speak in me,' not 'to me'), for the purpose, as 'invite in the sacrifice,' not 'to,' &c.), and sometimes even for the result and the manner of an action; the 'absolute' use has been already mentioned. The instrumental—perhaps the commonest of all—denoting, as I have said, the agent quite as often as the instrument, is also sometimes used to denote the time, and more rarely the manner of an action. It is evident how much a language like this has departed from its primitive form; and this lateness of Sanskrit syntax deserves notice, since we give so much weight to the antiquity of its accident.

3. But then **how did these other parts of speech arise** if verbs and nouns were sufficient? What are **adverbs**? and how did they arise? The name does not quite tell its tale; adverbs are not specially connected with verbs; but the Greek name 'epirrhemata' is clear enough; it means that which is 'joined to the predicate,' to define it more exactly. And their origin is in most cases plain: **they are really cases of nouns**. This you can see at once in Greek, in the great class of so-called adverbs ending in *-ōs* (*dikaiōs*, *sōphronōs*), which are all ablatives; and there are many others, locatives (as *chamai* = on the ground), and instrumentals (*nosphi* = separately, &c.). Now these cases had fallen out of ordinary use in Greece, and therefore the isolated examples left frequently seemed to belong to no noun; they could only be used in one connection, whereas a noun can be used in many; and they could not be

declined. They were therefore thought to be a separate division of speech, and had a name given accordingly.

4. We can show this in English :—*once, twice*, are old genitives of *one, two*; *once* is still spelt in northern English *anes*. *Needs* is another genitive = of necessity, as in ‘it must needs be;’ ‘*the more*’ is for ‘*thy more*’ = ‘more by that,’ the old instrumental of *the*; *whilome* was originally written *hwil-um*, and was the dative plural of *while* (*hwil*) a time; you may still hear in some places a genitive *whiles*, meaning at times; *seldom* is another dative. Sometimes, indeed, an adverb is not merely a case; it consists of several words, perhaps a whole sentence, run together and written together, such as *altogether, may be, nevertheless*; but even of these a great majority contain a real case, such as *now-a-days* (genitive), *whereupon* (originally *hwār-upon*, *hwār* being a locative); there are similar combinations in other languages, as in Greek (*dēlonoti* = clearly, *estin hote* = sometimes). Again, there are many little adverbs in all languages which cannot be proved to be cases—such as *up, on, off*, in English. But there is good reason from the analogy of similar forms in many languages for supposing that these also were originally cases, though worn down past all recognition. Generally, then, we may say that **an adverb is historically a petrified case**, though grammatically it is convenient to treat it as a separate part of speech.

5. Adverbs were one way of expressing more clearly and fully the circumstances of an action, just as the cases did, which they were once recognised to be. But there was a source of confusion in the cases themselves. These, as we have seen, had very general meanings at the beginning. Thus ‘*eo urbem*’ might convey the notion of going, and that a city was the object of that going: but then it was possible to go to a city in many different ways. If the name of the city was

given, it seems that the purpose of the going was clear enough from the context: thus you said 'eo Romam,' and so with a few familiar words as home ('eo domum'), &c. But at other times, when greater clearness was desired, you expressed the mere going to a place by 'eo ad urbem;' if you were going as an enemy, you might say 'eo adversus urbem;' if the town was on a hill, you would say 'eo sub urbem;' and so on. Again, when cases were lost, and one case did the work of many, some additional help was still more wanted. Thus the Latin ablative 'urbe' might be 'from a city' or 'in a city' (locative), or 'because of a city' (instrumental): therefore you said 'ab urbe' or 'ex urbe,' according as you merely came from the city or out of it; 'in urbe' if you lived in the city; for the instrumental sense 'urbe' alone would grammatically suffice, but you would probably change the expression and say 'propter urbem' or 'ob urbem,' with slightly different shades of meaning.

6. These defining words were called **prepositions**: very often they were undoubtedly adverbs, *i.e.* cases of nouns originally: *propter* meant 'near at hand,' then 'near' some place, with other derived meanings; and in English you can say 'I ran him through,' or 'I ran him through the body,' where 'through' is first an adverb, then a preposition. Probably it is a modified form of an old noun, which appears in Gothic as 'thairko' (= hole). Again, in Latin *coram* is 'face to face,' an adverb; and, first of all, was probably *co* + *os-am*; the *-am* being a locative form, almost, but not quite, peculiar to Latin, seen in *iam*, *nam*, *perperam*, &c.; then it is used together with an ablative = 'before a person.' But it is from the Greek that this appears most clearly; in this language even the commonest prepositions (*epi*, *pros*, &c.) were used without any noun, and most of all in the oldest stage of the language. So we believe, even though we cannot fully prove it any more than for adverbs,

that **prepositions** also were originally cases of nouns added to define the meaning more clearly, and by degrees attaching themselves more particularly to nouns. You would naturally think that the name means that which is 'put before' a noun. But this is not so. The word is a translation of the Greek *prothesis*. Now in Greek a preposition is put after its case nearly as often as before it; so too in Sanskrit, where, however, prepositions in the strict sense are rare: the term must have meant that which in composition of words was put before a noun or a verb. The process of combination of these elements with verbs is very well seen in Greek; in the oldest stage of the language they were still separate, *i.e.* still adverbs.

7. Next, what are **Conjunctions**? This carries us a great step further in the development of syntax. Cases, either still visibly cases or petrified into adverbs or prepositions, suffice to denote the circumstances of an action, so long as no other action comes into consideration. But when this no longer holds, **when one action is the condition or result of another, something more is needed.** The oldest and simplest method is to put the two actions side by side—expressed in co-ordinate clauses; and to leave it to the reader to determine their true relation. Thus we have in the Bible version of the Psalms: "Thou takest away their breath, they die:" here the first sentence expresses the antecedent cause of the second; but they are co-ordinated in the grammatical expression. Such simple constructions are common in the Veda. The next step is to find some loose link; if we turn again to the Psalms, we may find among many others: "Thou makest darkness, and it is night:" here the night is certainly meant to be the result of God's making darkness: but here again we have co-ordinate sentences, not a principal clause and a subordinate clause. Many traces of this stage linger

in the undeveloped syntax of Homer, *e.g.* in *Iliad* x. 224, 'sun te du' erchomenō kai te pro ho tou enoēsēn;' where the first part is really equivalent to a dependent clause; 'where two go together, one sees before the other:' but the two are put independently and joined by an 'and.' The well known '*de* in apodosis' is a survival in classical Greek of the same mode of expression.

8. Then lastly comes the stage when special words are used for the purpose of distinguishing the clauses in more logical fashion; which you may see, though, in the earlier (Prayer-book) version of the Psalms, '*when* Thou takest away their breath, they die:' and 'Thou makest darkness *that* it may be night.' These little words—whether used to bind together (as *and*, *also*) or to distinguish (as *but*, *however*) co-ordinate sentences, or to mark out subordinate clauses (as *when*, *if*, *so that*, *lest*)—are alike called conjunctions ('sundesmoi'). Now what are these words? Just like prepositions and adverbs, a mass of conjunctions are obviously cases—generally of pronouns; and we may suppose that the others were probably so too. We must again except the compressed sentences (see § 4) as *howbeit*, *nevertheless*, and a few verbs, generally imperatives, which by their nature, imply a condition, *e.g.* *suppose*, *grant*, or *granted that*; so in Latin *fac*, *licet*, *videlicet*, *i.e.* 'videre licet,' &c. *When* is the accusative masculine of *who*; *if* may be corrupted from a locative form of the same base, but more probably it is the same as the Icelandic *ef*, which was originally a noun and meant *doubt*; in the Latin too *cum* is the accusative of the relative pronoun, *si* the locative of the demonstrative, in Greek *ei* and *hōs* are respectively the locative and the ablative of the relative. In Latin even the simplest of all conjunctions *que* (and) is a form of the relative. Probably, also, *kai* in Greek. This shows the looseness and inartificiality of the links which were used to join

sentences ; just as you may hear in vulgar English, 'which he didn't want to go,' and the like.

9. So you see that etymologically there is no difference between adverbs, prepositions, and conjunctions ; they are all (with a few exceptions) cases of nouns (including pronouns) ; they can be to some extent interchanged ; *e.g.* adverbs pass into prepositions as we have seen ; *cum* is both a preposition and a conjunction in Latin ; *hōs* in Greek is an adverb ('as'), a conjunction ('how' or 'when'), and is even used with proper names in the sense of a preposition, 'to ;' perhaps there has been an ellipse of the true preposition ; but anyhow *hōs* has logically the force of one in the sentence as actually used. No doubt in use adverbs, prepositions, and conjunctions are generally distinct ; but there is no fundamental distinction between them : they have sprung up out of the same material, and have been developed as use required.

10. Last in our grammars comes the **interjection**. But this, so far from being a 'part of speech,' is in itself a whole speech, though undeveloped and vague. This I will point out more fully hereafter.

11. In this way we find that **all the parts of speech are but the modification of two, the noun and the verb**. To us the substantive, adjective, pronoun, verb, adverb, preposition, conjunction, interjection, seem so inseparably bound up with grammar that we cannot at first conceive a time when they were not recognised. Now we see that they are not necessary at all. **They don't occur in all languages**. They are found in our group of languages, and they are convenient logically ; but even with us they have varied. All grammarians have not recognised them all ; in fact the **earliest grammarians distinguished just so many parts as struck them ; and others were added afterwards**. Aristotle, as we saw, knew of the 'onoma'

and the 'rhema;' he also spoke of 'sundesmoi' (meaning probably not merely 'conjunctions,' but adverbs and prepositions too) and of 'arthra,' *i.e.* joints or sockets, meaning apparently the pronouns, by which the real limbs of language, the noun and verb, were jointed together; but he does not seem to have thought them necessary; rather they were the refinements of the Greek language. It is noteworthy that Aristotle made the marking of time a part of his definition of a verb; to this he was naturally led by the numerous tenses of the Greek. Yet this notation of time is only an accident of the verb: the verb would be just as much a verb if it had no clear distinction of time, as in the Semitic languages. The same point is brought out in the German term for the verb—*Zeitwort*.

12. The Stoics made further distinctions more curious than permanent. They divided the noun into 'common' names and 'proper' names: the former they called 'prosēgoriai,' to the latter they appropriated the original word 'onoma.' This again seems to have sprung from their philosophy: to common names they attributed a certain reality, a natural and necessary correspondence with the thing signified. They had not observed, what we often forget, that a name can but express one property of a thing; and that all the other properties which the name by association of ideas recalls to our mind the instant that we hear it, are not in the name at all. But even the Stoics could not maintain that every 'Agatharchus' would necessarily be a 'good ruler,' any more than we should expect every 'Smith' to be good at the forge. But their distinction (in the later form 'onoma idion') has survived in our 'proper name.' They are also said to have invented a term 'pandektes'—the 'all-receiver'—for the adverb; however, their successors abolished this refuge of grammatical despair. But they seem to have done some real good in distinguishing 'arthra' into 'definite' (by which

they meant personal pronouns), and 'indefinite,' the other pronouns.

13. It was at Alexandria, the earliest home of criticism and grammatical activity, that we first get—from Zenodotus—the term 'antonumia,' our **pronoun**, from which he distinguished the 'arthron' as the 'article' pure and simple. 'Pronoun,' like so many other terms, is but an imperfect definition of the thing; it is certainly put 'for a noun' in such a phrase as 'I told John that he was wrong.' But in the phrase 'He who does wrong is unhappy,' *he* and *who* include all the Johns in the world, and the Toms and Dicks into the bargain. A pronoun is a general noun, which may sometimes have a restricted use, and it may be either a substantive (*he*) or adjective (*any*). In its formation it has a base and cases, just like any noun. Historically, therefore, a pronoun is a noun and nothing else, though logically it may be distinguished as a separate part of speech. At Alexandria also Aristarchus distinguished prepositions as a class distinct from 'sundesmoi,' and probably also **participles**. These were great bugbears to our grammatical forefathers. What were these creatures with cases like nouns, yet followed in a sentence by other nouns, just like verbs, which also like verbs denoted difference of time—doing, having done, being about to do? No answer could be agreed upon, and a new 'part of speech' arose—the 'metoche,' that which 'partakes' of the nature of the noun and also of the nature of the verb; and of this term 'participium' is a not very obvious rendering.

14. From Alexandria, in due course, Dionysius Thrax took his eight parts of speech to Rome; his 'onoma,' 'rhema,' 'metoche,' 'arthron,' 'antonumia,' 'prothesis,' 'epirrhema,' and 'sundesmos.' And from that day to this has survived the mystic number eight. No grammarian could be forgiven who diminished the number, though he might alter the

claimants to a place in the august assembly. And you will see that two have been changed. The 'metoche' was adjudged to belong to the verb. Then the term 'arthron' was not wanted out of Greece; the Romans had no 'article.' So two places were empty. One was filled by the subdivision of the noun into the **substantive** and the **adjective**, the name of the thing and the name of the attribute of a thing; again a distinction logically valuable, but unimportant to the student of language in and for itself, because the adjective is identical in formation with the substantive. And a new part was added at the end—the 'interjection,' to which the wiser Greeks had not allowed a place. **Such is the history of our eight 'Parts of Speech.'**

15. Why is the part of grammar which describes them called '**Accidence**'? Again you must go back to Alexandria. Dionysius, or some one before him, noted that there were five 'things that went by the side' of nouns, these were gender, kind (according as the nouns were primary or derivative), class (according as they were simple or compound), number, and case. These 'side marks' were translated at Rome by the neuter plural participle 'accidentia,' all that pertains to nouns; and the term, when applied to the verb also, included all that we call (as if 'accidentia' had been a feminine singular) 'accidence.'

CHAPTER VII.

THE BEGINNINGS OF SYNTAX.

1. EVERY grammar (under the head of syntax) lays down the rules, which are observed in the language it treats of, for the ordering of words in a sentence. Many of these are common to all languages, with very

trifling exceptions, as the 'concorde,' the simplest uses of the cases, the primary usage of the subjunctive, and the like. It is in the special development of these by different languages that the genius of each language is best shown. But with these we have not now to do. I only wish to say something about the nature of these 'rules' of grammar. We are apt to regard them as final for each language, and to think that any exception must be wrong. Thus, for example, when we read Greek we find certain rules in our grammar, and if Homer or Sophocles wrote differently in some respects, we think, not perhaps that they wrote bad Greek, but we take it for granted that their variations are 'exceptions' to our rules. But language cannot be so bound. **Rules lay down certain practices observed in speaking by men of a certain day.** But their grandfathers talked a little differently, and so do their grandsons; and little by little the differences becomes considerable. What we really have in language are habits of expression which are constantly growing and changing; and no set of rules can limit, no one set can express this increasing growth. What was a familiar use for Hesiod might not be so for Demosthenes; but it is absurd to explain Hesiod's variation as an exception to a rule which he never knew. The beginnings of syntax are like a wild wood; every thing grows exuberantly without a shaping hand; then by degrees portions are cleared and a certain degree of order is introduced, yet not so completely but that some wild growths still indicate the primæval vigour and fertility; lastly comes the literary period, like the Italian garden, where trim order is supreme.

2. The rules of Greek grammar were deduced by Alexandrian grammarians from the writings of the most flourishing period of Greek literature. But Sophocles and Thucydides did not write by those rules, for the good reason that no rules then existed; they made the matter out of which the rules were

made. They wrote, we may say, tentatively; they felt the unbounded wealth of their language, and they threw out bold forms of expression, some of which survived in common use, and some did not. Unless we see this, we cannot really understand their style. Thucydides was not consciously writing bad grammar when he wrote his amazing anacolutha, of which a good specimen was once constructed at Cambridge, as follows: "An awkward thing to drive is pigs many by one man very." He was letting his growing thought frame his language, confident that the reader would be guided through the puzzle by his comprehension of the sense. No doubt literature will limit variation; when ninety-nine persons use in writing the same constructions, the hundredth will not vary much unless he wishes to be thought either uneducated or affected. General principles will become stereotyped. But enough will always be left to individual freedom of style; still more to the essential freedom of language as a whole, which can never be utterly bound by rule. All language is free within the limits of intelligibility.

3. **Every rule is really the expression of that which is no more than a prevailing tendency**—a main current which may have many a back-water. What can be more fluctuating than the 'rule' that transitive verbs require an accusative? You say 'amo te;' where 'te' is the accusative after a transitive verb. Then when 'amo' is used alone, as it easily may be, what is it? Is it no longer transitive? And if the same verb may be transitive and intransitive, what is the good of the rule? When I say 'capio baculum,' I take a stick, I have no doubt followed my rule, in using the accusative after a transitive verb. But I say 'utor baculo,' 'I use a stick:' is 'I use' any less transitive than 'I take'? Does not the 'sense pass on' to the noun? Is a noun any less required to complete the idea with the one than with the other?

4. The truth is this. We try for the sake of clearness to draw a definite line between transitive and intransitive verbs, though no such line exists. We then give certain exceptions; some verbs which lie on the frontier have little rules for themselves. No *rationale* is given of the different uses of the same verb. The result is that we have a set of rules quite good enough for a learner, though sometimes perplexing even to him. But often no sort of explanation is given of these rules—no full light is thrown on the deeply interesting life of language. We have indeed no right to complain of a grammar for being no more than it professes to be—a key to a particular language. Rather it is right to point out that a special grammar can from its very nature do no more, except incidentally.

5. But comparative philology can explain the anomalies which present themselves to the student of the syntax of a single language, or even of one family of languages. It can throw light upon this anomaly of verbs sometimes transitive and sometimes intransitive, by pointing out the original relation of the verb and the noun. The verb and the noun were originally separated by no such line as is drawn between them in our syntax. Nay, clear traces remain in our own family of speech of a time when they were much nearer together. We find in old Latin writers examples of an accusative following a noun, just as it commonly follows a verb. In Plautus there is the question 'Quid tibi hanc tactio est?' as we might say in English 'What do you mean by touching her?' where *tactio* takes the accusative just as *tango* would do. So in Sanskrit we find *dātā vasu* = 'a giver of wealth'; here the form is like what 'dator opes' instead of 'dator opum' would be in Latin. Nay, in Sanskrit there occurs even such an anomaly as a verb undergoing comparison: e.g. *bhavati-tarām* (= 'est-terum') 'he is more so.' We have seen the

infinitive, although itself a dative, regularly followed by other nouns ; so also cases follow the supines and the gerunds (which are secondary nouns) in Latin, and the so-called 'indeclinable participles' in Sanskrit, which are instrumentals of nouns in *tu*, e.g. *dattvā vasu*, 'having given wealth' (literally 'by giving wealth.')

6. Much more is this want of distinctness in use found in languages alien to ours. In Japanese, a somewhat more developed language than Chinese, the verb and noun are not yet divided : there is no clear line between them in Turkish. But in our family of languages they have emerged as slightly different forms of one radical idea distinguished by suffixes, and sometimes by vowel-change : e.g. from root *dūc*, comes *dūc-s* (*dux*), a leader, and *dūc-o*, I lead ; from root *vōc* comes *vōc-s* (*vox*), a voice, and *vōc o*, I call. The verb extends the radical idea in the direction of action, motion, change. The noun tends towards the opposite pole of rest and permanence. The more then of permanence is contained in the radical idea ('being,' 'believing,' &c.), the more of the substantive is there in the verb, and the less does the verb require any noun, as an object, to fill out its sense—in grammatical language so much the more is it 'intransitive.' The more of action and the less of permanence there is in a verb, so much the more is it 'transitive.' But the amount of permanence in almost any verb may vary according to the whole idea to be expressed : thus in 'amo te,' action is denoted, and you may for convenience call the verb transitive ; 'amo,' is 'I am in love,' and here a permanent state is expressed, and you may call it intransitive. But really this verb is neither transitive nor intransitive in itself : all depends on the context.

7. Of course there are verbs which in their essential meaning are so very 'active,' others so 'permanent,' that the context can make little difference, and there is no harm in calling them transitive or

intransitive. Yet the flexibility of language is almost infinite. When we find an accusative with the verb 'to be,'—as we do in Greek (*akēn esan* = they were silence) and frequently in Sanskrit—we seem to have got a very remarkable example of the instability of rules of syntax. Again when a verb is classed grammatically as 'intransitive,' though it obviously 'passes on,' as in 'utor baculo,' the explanation is to be found in the primary meaning of the words which comparison enables us to recover. Thus *utor* was originally a reflexive verb (Ch. V., 25): *baculo* represents the instrumental case: the whole phrase meant 'I employ myself with a stick:' just as *vescor carne* meant 'I feed myself with food.' Clearly the accusative had no place here at all when the verb was used in the original sense: that original meaning was superseded by a new one, yet enough of it was left to retain the old construction; and for this reason or from the influence of habit the verb was used in no other.

8. Very frequently, however, a verb gets slightly different meanings in course of time, and accordingly can be used in different constructions. Thus you say 'I ride,' and feel in certain cases no imperfection in the expression: it represents a condition, 'for me, I ride,' in Robert Browning's poem. But you say also 'I ride a horse;' and are equally well satisfied therewith: whether 'horse' is an 'accusative of reference,' or whether 'ride' has got some fuller meaning and is now equivalent to 'sit upon,' you do not consider. Every Greek and Latin scholar will recall at once the different 'constructions' of the same verb, which mostly arise from a gradual change or amplification of meaning.

9. The different uses of the accusative as given by grammarians may show us how much more is often put into a grammatical form than is really there. Thus we are told of the accusative

of motion towards a place, the accusative of duration in time, the accusative of the compass of the action, &c. Now in one sense this is quite right: these phrases represent truly enough the sense conveyed by an accusative **with different contexts**; they classify these uses, distinguish them, and enable us to recognise similar ones—all of which is absolutely necessary in learning a particular language. But the student of language, in and for itself, must declare that **none of these senses belong to the accusative. They are infused into the whole sentence**—not the accusative merely—**by the intelligence of the hearer.** The accusative form indicates nothing except that a verb goes before it; indeed, it does not prove so much as that, because we have to distinguish the nominatives which have the same form. But we have already seen (Ch. VI. 5) that if the accusative of the name of a place is added after a verb which denotes going, it is easy for the hearer to understand that motion to that place is expressed by the whole sentence, though the same may be expressed more clearly by using a preposition: ‘*eo Romam*’ or ‘*eo ad Romam*.’ But what I wish you to see is that there is nothing in ‘*Romam*’ *itself* to signify ‘motion toward’ Rome, though it may be convenient to have a rule in grammar that ‘motion to a place can be expressed by an accusative.’ So the intention or ‘compass’ of the act of going is denoted by the whole sentence ‘*spectatum veniunt*’ = ‘they come a-seeing.’ If you say ‘I went two miles,’ it is the general sense which gives the ‘extension in space’ attributed to the case; in the sentence ‘he lived two years’ the same explanation is true of the ‘duration of time.’ If you say ‘he lived two miles,’ you get no sense at all; there is no ‘extension in space’ in the accusative except with a suitable context.

10. Of course all these expressions could be made more accurate by using a preposition: ‘I went over

two miles,' 'he lived during two years.' We might be disposed to think that they are mere inaccuracies, the preposition having been carelessly dropped. But I do not think that is so. They are found in all languages, up to the oldest; and they seem to me rather remnants of the older stage of language when the means of distinction were fewer, and so the accusative—one of the oldest cases—did the work of others not yet firmly established. Then they survived just because no more was actually needed to express the meaning. Language, as I have already pointed out, is only bound by the need of intelligibility; **it may have just so much vagueness as is consistent with being understood.**

11. Often this vagueness of expression may be more expressive than greater clearness; it may widen and increase the impressiveness of the idea by leaving more to the imagination, somewhat in the same way as vagueness of description does (it has been noted) in Milton:—

“What *seemed* his head
The *likeness* of a kingly crown had on.”

Just so it has been well pointed out, when Euripides wrote (*Hippolytus*, 1339)—

“Tous gar eusebeis theoi
Thnēskontas ou chairousin,”

(‘The righteous dying, the gods take no pleasure’) he gave greater force than if he had used (as he naturally would have done) the dative with a preposition instead of the accusative. It is not merely the feeling of the gods which is expressed; rather the death of the righteous is held up as a universal object to the whole world, not merely to the gods. If we translate ‘*at* the death of the righteous,’ we give just that logical connection which Euripides avoided. The effect is given more nearly by a loose connection: ‘the righteous dieth, and the gods take no pleasure.’

At all events the sense is plain enough, though the construction seems loose, just as when in our own language Mr. Tennyson writes of the children who

“ Whistle back the parrot’s call, and *leap* the *rainbows* of the brooks.”

But we understand the loose accusative, and enjoy the deviation from rule.

CHAPTER VIII.

ON THE NATURE OF LANGUAGE.

I. IN this very rough sketch of the growth of syntax what have we seen of any **correspondence between language and thought**? The use of words is to express thought; and it certainly seems at first sight natural to suppose that a sentence must be divided into words which shall correspond to the divisions of the thought; or at least that the essential divisions of the sentence and the thought shall be the same. Of course it is possible to have in our mind for a moment some conception of a thing simply as existent, and not in any relation to anything else;—we may have an idea of man, health, &c., as things familiar to us, but not as doing anything or being in any particular state. Such an idea may be rapidly called up in our mind by some one speaking to us, or in mere idle reverie, or in many ways: the idea may then pass away without our having really thought about the thing at all; and, so far, we want nothing more than the name of the thing, as a sort of label by which to identify it as it flies through our mind. But if we do really think about it, even in the simplest way, it must be in connection with something else—some object which it is concerned with—some action which it is doing—some state in which it is. In logical phrase, we need two terms and a copula, *i.e.*

something to join together the two conceptions which exist separately in our mind (see *Primer of Logic*, Art. II). Now, must there be a distinction in language corresponding to this primary distinction in thought?

2. Let us try our own language first. 'Victoria is queen,' 'honey is sweet,' 'to err is human : ' here we have sentences broken up each into two terms, with the verb serving merely to bring those terms into connection. No doubt 'is' once meant more than this : first of all it expressed breathing, then existence, as it does now sometimes, *e.g.* when we say 'God is ; ' and indeed the sense will not be changed, though the form of expression would be cumbrous, if we expand into 'Victoria exists queen,' &c. In such sentences as these grammar and thought do truly correspond : the terms in grammar may be made up of more words than one, as '(to err) is (common to all men) ' ; but logically and grammatically a division is made at the same places. If, however, we say 'Victoria reigns,' we have not the same correspondence. The *s* in 'reigns' (no matter what its origin was) is practically the copula which joins the ideas of Victoria and reigning ; and this is no longer separate from the second term, but has become an integral part of the whole predicate 'reigns.' If, again, we say 'Victoria governs England,' we have the same blending in the predicate 'governs,' but we have a distinct word—'England'—to express the object of the governing ; these two ideas are not combined in our language. In 'I reign' there is no formal copula : the connection between 'I' and 'reign,' grammatical subject and grammatical predicate, is supplied by the mind of the hearer or reader. In 'reign!' there is no expressed subject, but the tone of the speaker indicates the meaning, while the reader gathers it from the mark (!), or, failing that, in the best way he can. Generally speaking, in analytic languages (Ch. II., 2),

such as ours, **subject** and **predicate** and **object** (where such exist) are distinct words; sometimes the copula is distinct, sometimes it is blended with the predicate.

3. But it is clearly **not necessary** (as we see from our own language) that there should be any **distinction in form to mark which is subject and which is predicate or object**. Sometimes a surviving inflection makes that distinction with us, but apart from this, our language is much on a par with Chinese in this respect. Certainly we have distinct words for nouns and verbs, which the Chinese have not; and these generally remain fixed. But, if you will think, you will recollect plenty of instances where the absence of inflections has allowed a noun to turn into a verb. I have seen at the end of a telegram the words 'wire reply,' and I had no doubt that they meant 'send a reply by telegraph,' that 'wire' was a verb for the nonce, and 'reply' the noun. I had indeed the order of the words to help me, but the order is not invariably kept in English, and if I had gone by the dictionary alone, I must have concluded that 'reply' was the verb, and 'wire' the noun, and that the answer was to be just the word 'wire' which was put first for the sake of emphasis. But I recognised the elasticity of language, and I felt that the time would probably come when this particular idiom like many other *parvenus* would cease to be snubbed in polite society, and when we should find in our dictionaries 'wire, verb active, to send a message by telegraph,' with perhaps a comparison of the verb 'to cable' 'to send a message across the sea,' and with examples, let us hope, as all good dictionaries ought to have, of the use of the word drawn from the literature of the future. The noun reply has, I imagine, been spelt with a *y* only because the verb is so spelt; cp. French, 'repli,' 'replier,' *i.e.* 'replicare' (refold). It seemed natural that the form for the noun and the

verb should be the same, not different ; just so verbs and nouns which differ as 'practise' and 'practice' tend constantly to be written in the same form.

4. Now this state of things—identity of form between noun and verb, and consequent importance of position—is exactly what we find in Chinā. In Chinese the same word, according to its position in the sentence, will regularly do the work of a noun or of a verb—may mean good, or goodness, or being good ; and no copula is employed or felt to be necessary. By change of position can be denoted the different relations which we denote by cases, or by the further help of prepositions ; for example 'house man' and 'man house' denote respectively 'the man of the house' or 'the man's house. In this way **different ideas are expressed by different arrangement of the same radical words**; first comes the subject, then the predicate, then the object. This is so much our own practice that it seems quite natural to us. Only arrange the words on a recognised principle, and all will be clear. But then, do we always arrange our words so? Do we never put the subject before the predicate, or the predicate before the subject? We do, not regularly, still not uncommonly. Yet no confusion arises, when we vary. When Mr. Tennyson writes

" Rose a nurse of ninety years,
Set his child upon her knee," &c.

we feel that 'rose' is a verb, not the name of the nurse, though there is nothing in the word to tell us so, and though the 'natural order' is broken. It would seem, then, that in analytic languages neither distinction of form nor fixity of order is necessary for clearness of expression. Common sense supplies all that is wanting. Though our language were twenty times worse than it is as an exponent of thought, habit would make its usages clear.

5. In synthetic languages the result is

different. Here forms are commonly distinct enough ; noun is noun, and verb is verb ; and they do not interchange either in form or in use. In 'errare est humanum' you may think that a verb is doing duty for a noun as subject of the sentence ; but in the first place 'errare' is not really a verb, and in the second it is equivalent to 'inclination towards error ;' which is only an enlarged subject. **But the great divisions of thought—subject, predicate, object—are not kept necessarily distinct** in these languages. It is true that there is no confusion in the example above given ; no more than there is in such a phrase as 'quantum errat, incertum est ;' wherein the two first words may be called a substantival clause ; and they form a distinct subject to the sentence. But when I say 'erro,' subject and predicate are combined. 'Errat' is a complete statement ; though if the subject 'he,' expressed by the final *t* in 'errat,' is too general, we may also say 'Cæsar errat' for the sake of greater clearness. So too I can say 'ego erro' for the sake of greater emphasis. Now in this mixing up of the two elements in one word, there is no confusion of thought. The one word, which made up an entire proposition to a Roman, was just as clear to him as two words are to us. But you may see that, if language need have no distinct expression for a distinction so fundamental as subject and predicate, the relation between thought and language does not amount to identity.

6. The Indo European languages generally keep the object distinct from the predicate ; in Sanskrit, indeed, you can say in one word 'I wish for a son,' and the like ; where it seems as though object and predicate were blended ; but in reality such a verb is but a derivative from the noun ('son') with a formative suffix, which does not really mean to 'wish ;' that meaning has been infused into it by use and common acceptance. The enormous Sanskrit compounds

(Ch. IV., 19) are nothing but enormously developed predicates; the subject is always distinct from them, and the copula commonly is understood. But some synthetic languages of other families do not maintain any distinction in use. In the incorporating languages of North America (Ch. II., 4) we may find an entire proposition—subject, predicate, and object—run into a single word; and the component parts are not kept distinct; for the sake of ease the different members are shortened, so that the whole may be very far from clearly representing the elements contained in it. In Accadian (as we saw Ch. II., 3) the object can be inserted between the subject and the verb; the result is but one word, but the different parts of the compound are quite perceptible. The confused American compounds are found in a later stage of the same process: they show the besetting danger of the synthetic method, a want of clearness much greater than can be found in any analytical language.

7. As a rule **the more a sentence is broken up the clearer will its meaning be.** But clearness is not capable of exact measurement. In our own analytical language sufficient clearness may be had when the sentence consists of but a single word. If I call out 'here!' the person to whom I speak understands that I want him to come to me, though I have used neither a substantive nor a verb; the meaning however is implicitly conveyed, the single word is an unexpanded command. Just so with those little sounds which we call interjections. If somebody tells me a story and I say 'whew!' the story-teller will probably understand that I don't believe him. An interjection is nothing but an undeveloped sentence (Ch. VI., 10). It conveys the thought with the maximum of brevity and the minimum of clearness. But the most fully developed sentence may be misunderstood also; though of course it is less likely. The clearest speaker of the clearest language will not always express

his meaning beyond any possibility of mistake. Generally the most analytic languages will be the most clear, and the most synthetic the least clear. But no language, that we have examined, has succeeded in finding an expression for thought which is perfectly exact in form.

8. Speech then is an instrument of thought, and not a perfect one. This conclusion is important because speech has sometimes been identified with thought; and it has been held that the laws of speech—the principles which govern the production and development of languages—are the same as the laws of thought—logic. Hence have arisen many false conceptions of grammar. Grammarians have begun by laying down the modes in which men must think, and then proceeded to find in speech the necessary exponents of these modes. Thus, for example, it has been maintained that the instrumental case was invented to express the conception of a cause, already present in the mind; the dative to denote operation; and so on. This is a great error. It may be conceded that some of the essentials of thought, subject and predicate as we have already seen, must find their exponents, whether separate or compounded together, in every sentence. But beyond this, logic should be kept out of grammar. Grammar has its 'categories,' its forms to express the 'whence' and the 'where,' &c.; but these do not coincide with the logical categories, and they must be discovered in a way independent of these, from the language itself. Every language has its guiding principles; and we can often give the reason why it has taken this or that particular form; when we cannot, we believe that there is some cause, though we in our ignorance cannot say what it is, as we saw when we were considering the origin of the cases. We could recover their earliest

form and their earliest use, but the cause, why that particular form was chosen for that particular use, was beyond our grasp. But that cause is never a compulsory one ; there is no *must* in the matter. We saw reason to believe that many different forms would do equally well for the same use. Then out of many possible forms of expression some one secures acceptance by its greater suitability, real or apparent. **The fittest form makes its way into general use.**

9. You may understand this point, that speech is only an instrument of thought, not thought itself, from another consideration. **Speech is only one way in which thought can be expressed ;** there are others as well, none indeed capable of the fine distinctions which speech conveys, but yet sufficient as a means of communication.

10. First there is the **language of gesture.** If you ask for something, and the man whom you ask shakes his head, that is quite as intelligible as any 'no !' So you may beckon by the finger instead of calling with the voice ; you may refuse politely by shrugging your shoulders ; you may show approval by a pat ; a kiss is the current expression of affection. Think for a minute how much a Frenchman says by the motions of his body ; they are often much more intelligible to us than his words. Indeed words seem to be only employed to eke out his meaning ; and though we staid Englishmen are apt to think him ridiculous, he is using a wealth of expression of which we rarely avail ourselves. One reason why Englishmen are commonly ineffective speakers in public, is their neglect of action in speaking. Because bad and unsuitable action in the delivery of a speech offends us, we commit the error of thinking that all action is bad. Depend upon it, we should not have thought so, if we could have seen Demosthenes or Cicero. In the more effusive temperaments of the south, action and words seem to harmonise by an unerring

instinct. If we can once convince ourselves of this great fact, how much action can do, we shall find it is quite possible to imagine how the earliest inhabitants of the earth might converse principally by gesture, and only employ a few sounds to make their meaning clear.

11. But indeed we need not resort to imagination. We have among us deaf mutes conversing by no other means, but gesture only. They learn to communicate by imitation, and we do so as children on no other principle, the difference in practice being that we learn (*i.e.* imitate) our parents' words: deaf-mutes imitate by signs the most distinctive property of an object; and it is worth remembering (what I have said before, see Ch. IV., 16,) that our names for things do but represent *one* property of the thing so named. Most of their gestures doubtless require repetition before they can be certainly understood; that is, they are conventional: but this convention is of the simplest kind, and needs no help from language to explain it. Some of their signs are very ingenious. 'To pull up a pinch of flesh from the back of one's hand is *flesh* or *meat*. Make the steam curling up from it with the forefinger, and it becomes *roast meat*. Make a bird's bill with two fingers in front of one's lips and flap with the arms, and that means *goose*; put the first sign and these together, and we have *roast goose*.' One or two dinners of roast goose, and one or two repetitions of the sign, would make these gesture-words perfectly intelligible. Observe that this method of communicating requires no knowledge of the name 'goose' as used in England. It is quite different from the way in which people who are born deaf only (and not *mute*) may be taught by the eye to attach certain meanings to written symbols; and even those who are blind as well as deaf, may, by long labour, be trained to learn that raised letters are the conventional representation of the actual things which they know

by touch. These people merely learn, with much greater difficulty, the language which we speak. But the language of deaf-mutes is gesture and nothing else; though of course they may afterwards learn to read and write our language also.

12. Secondly, you can **communicate by writing**, and so express your thought. 'Ah, but,' you say, 'writing implies speech, letters are the symbols of spoken sounds, and have no other value. The letters CAT have no meaning, except in so far as they recall familiar sounds, which in their turn recall the idea of a certain animal. If they do not denote sounds already familiar to us, we do not understand them.' That is quite true. The letters which we write are nothing more to us. But in the beginning they were not so. Our alphabet came to us from Rome, with Roman civilization; the ancient 'runes' or letters of our Teutonic forefathers (Anglo-Saxon 'rūn,' 'a secret,' the knowledge of which constituted a man a 'rūna' or wizard, and made the German prophetess the 'Alruna') may still be seen in a few old inscriptions, as on the Ruthwell Cross; but they were soon conformed to the Latin type; a few only remained, *ƿ* (called 'wen,' that is *w*) and *þ* (called 'thorn' = *th*), as symbols of sounds which the Latin of that day did not possess; to represent *dh* (called 'edh') the simple *d* was modified (ð): these have vanished out of our alphabet, which has returned to the Latin form; we lose by having but one compound symbol *th* to denote two simple sounds.

13. To Rome the alphabet came from Cumae, memorable as the place where it first appears nearly in its present form, now only a waste site in the desolate Campagna. To Cumae it was brought from Greece; to Greece, in a still more different form, from Phœnicia: and the Phœnicians received it from Egypt. Its history in Egypt is long, and not always perfectly clear: but so much is fairly certain.

These characters, which the Phœnicians took as the symbols of certain sounds, did denote at that time those sounds, or nearly those, in Egypt ; but they also at the same time in Egypt conventionally denoted things as well as sounds. They can be traced back to their oldest forms—to hieroglyphics, copies drawn with extreme exactness of actual things. In process of time these were drawn more rapidly, and lost their original shape, till they became like what we see them now. They were no longer plain pictures ; and so they came at last to denote the same sound in the spoken language as the name of the thing which they still conventionally represented. Thus the symbol which denoted a fish became also the syllable *an* ; and was used for both. By degrees, not merely syllables, but the separate sounds, vowels, and consonants, got their proper symbols. But the strange thing, as it seems to us, is this, that the symbols were not used at last to express these sounds, and these sounds alone. On the contrary, they retained always something of their original hieroglyphic value ; thus, for example, an arm with a stick, the Egyptian hieroglyph (or ‘ideogram’ as it is better called) for ‘force,’ is added after the phonetic characters by which was expressed an action done with force ; as though these characters, by themselves would not have been enough to express the idea to the Egyptian mind without the original ideogram which could alone have denoted it in earlier days.

14. This fact shows plainly how natural hieroglyphic writing seemed to the Egyptians, and how little natural phonetic writing seemed, and may also show us how entirely independent of spoken language written symbols were felt in their origin to be. In the same way the Assyrian cuneiform character was partly ideographic and partly phonetic ; there can be no doubt that it originated in ideography, just as the Egyptian did, and it never became alphabetic in our sense of the word, by which every consonant and every vowel has a

symbol ; in Assyrian each symbol represented phonetically a whole syllable. The reason of the peculiar wedge-like shape is plain enough ; Assyrian history was graven on the rock with a chisel, and the wedge is the mark which one or two strokes of the chisel most easily make. At an earlier date the symbols were much more complicated, and their ideographic meaning can be made out ; but they are composed entirely of straight lines, so that there is nothing of the beauty of form seen in the Egyptian hieroglyphics. In China ideography and phonetism exist to the present day, side by side, and the same symbol represents an object pictorially (though the picture has been greatly blurred by time) or a combination of sounds. Now these three systems are probably the parents of all the alphabets of the Old World, and all were originally ideographic. They were developed by their inventors to a very different extent. But it is very remarkable that in no case did they work the ideographic element out so as to reach pure phonetism. It was reserved for the Japanese to borrow the Chinese symbols, and represent by them syllables, and nothing else ; for the people of Susa to do the same for the Assyrian, and for the Phœnicians to develop a pure alphabet out of the Egyptian characters. All this shows how fully ideography was regarded as a method of communication quite distinct from ordinary speech.

15. You see then that speech is not the only way of conveying our ideas. Speech, ideography, gesture—all these and others—are different, and were originally independent methods of communication between man and man. You could get on by gesture, you might even have a history without language, written or spoken, by means of ideograms and gesture. Speech has to a great degree superseded all other methods by reason of its greater convenience. But all alike are but instruments of man for the expression of his thought.

16. **What is speech?** The question should be answered, though very briefly, in order to show how wonderfully fine the mechanism is by which the different sounds are produced, and also that you may the better understand the reason for some of those changes which I have mentioned. Speech is the expression of thought by the instrumentality of a succession of sounds; and those sounds are produced by a current of air passing from the top of the windpipe, and modified in different ways by the speech-organs—the uvula (*i.e.* the soft palate which is movable at the back of the mouth), the tongue, the teeth, and the lips. **This current of air is the material of speech.** But that material is not always the same. When the glottis or aperture of the windpipe is fully open, mere **breath** issues from it. But when the glottis is partly closed by bringing nearly together two ligaments called the chordæ vocales, and these ligaments are thereby stretched, the breath as it passes through is changed by the vibration of the ligaments and becomes **voice**. Then breath modified by the speech organs produces what are called ‘hard’ or ‘surd’ or ‘breathed’ sounds—*k, t, p, f*, &c.; voice modified in the same way produces ‘soft’ or ‘sonant’ or ‘voiced’ sounds—*g, d, b, v*, &c., and all vowels. You may test the difference between breath and voice in this way. Try to make the sound *p* without opening the lips; you will find it impossible; there is nothing but mere unvocalized breath in the mouth, and no sound can be made till the lips open, when the *p* is heard at once. But if you try in the same way to sound *b*—for which sound the mouth is just in the same position as for *p*—you will be able to make a sort of sound before opening the lips, because there is voice in the mouth; though the sound will be imperfect, because the essence of a *b* is that it is produced by the lips when they open, and vocalised breath escapes.

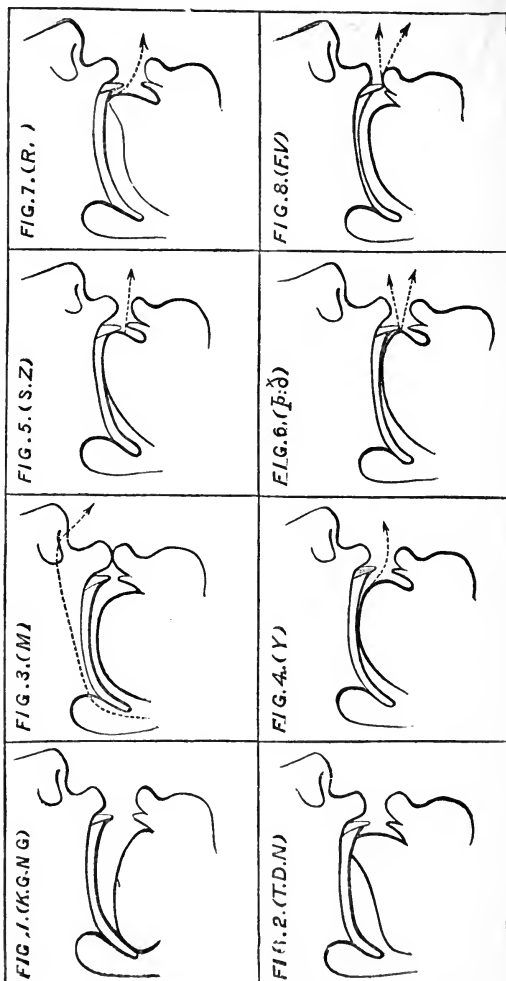
17. The material of speech, then, is breath or

voice. If the mouth be kept in an open position and breath is emitted, nothing is heard. If with the mouth in an open position voice is emitted, some **vowel** sound is heard; what the vowel is, depends upon the position of the tongue and lips. If the breath is checked in the mouth, a **hard consonant** is heard; if voice is checked, a **soft consonant** is heard. If the breath or voice is completely checked by closing the passage altogether with the tongue or lips, a **momentary** (also called a 'mute' or an 'explosive') consonant (*k, g, t, d, p, b*) is heard at the moment when the passage is re-opened, and no longer; hence the name; if the check is not complete, if the organs only approximate so much that the breath cannot escape without friction, a 'fricative' consonant is heard (*h, ng, y, s, z, sh, zh, r, l, n, th, dh, wh, w, f, v, m*); and as this sound (unlike a momentary consonant) can be prolonged for some time, it is called also a **continuous** consonant. An important subdivision of continuous consonants is called **nasal**. These sounds are produced by dropping the uvula, and so diverting some of the voice from the mouth through the cavity behind the mouth (called the pharynx, see the diagram for *m* below) and so out through the nostrils.

18. Consonants are further divided (cross-wise) according to the part of the mouth where the check is made; if it is made at the back of the palate by raising the back of the tongue towards the palate, we get a **guttural** consonant—the hard momentary consonant *k*, the soft momentary *g* (in 'get'); the nasal *ng* (in 'sing'); and the continuous sound heard in the German 'nach,' which we eschew in England. It is probable that *h* is a continuous sound produced even further back than this *ch*; but the nature of this sound is doubtful. For all these sounds the point at which the tongue is raised to the palate is the same. You may trace the formation

of the other sounds from the back of the mouth to the front. By raising the centre of the tongue to the centre of the palate and emitting voice, you get the sound *y*. By raising the centre and point of the tongue to the centre and front of the palate, you get the **palatals** *s* (breath, as in 'seal') and *z* (voice, as in 'zeal'), both continuous sounds; if rather less of the tongue (centre and point) is raised, so as to cover less of the palate, you get *sh* and *zh* (the sound of French *j* and heard in our word 'pleasure'). By raising the point of the tongue to the front of the palate immediately behind the teeth but not touching them, you get the so-called **dentals**—the momentary, *t* (hard), *d* (soft); and continuous, *n* (nasal), *r* and *l*, both soft fricatives, but produced in different ways—*r*, by letting the breath escape over the centre and tip of the tongue, for which reason the sound is called a 'central' one; *l*, by letting it pass by the sides of the tongue ('lateral'). By raising the tip of the tongue against the upper teeth, you get the two continuous sounds which we denote by *th* in 'thin' (hard), and 'then' (soft). By letting the breath, or voice, escape laterally when the upper teeth are pressing on the lower lip, you get the **labio-dental** *f* or *v*: here the tongue has holiday. Lastly, by using the lips only you get the **labials**; *p* and *b* the hard and soft momentary sounds; *m* the nasal; *wh* (really *hw*) and *w*, continuous central sounds, for which the back of the tongue is raised; and it is also possible to make a purely labial *f* and *v* (laterally) by bringing together the outer edges of the lips.

19. I have already mentioned the peculiar sounds called 'trills'; they are hardly articulate sounds, and are produced by laying the tongue loosely against different parts of the palate, and then making it vibrate by a strong breath. To this class belong the 'North-umbrian burr,' and the French and Scotch *r*.



20. These diagrams, which represent the position of the mouth in the production of some of the consonants will, I hope, make the description clearer. They are taken from Mr. A. Melville Bell's *Visible Speech*.

21. Fig. 1 gives the position of the mouth for *k*, *g* and *ng*; but in sounding this last the breath passes through the nostrils, and its course may be represented by a dotted line passing through the pharynx, as in Fig. 3. Fig. 2 gives the position for *t*, *d* and *n*; for *n*, add the line through the pharynx. Fig. 3 represents *m*; take away the dotted line and the diagram will represent *p* and *b*. In these three diagrams the closure at the different parts of the mouth is complete. In Fig. 4, which represents *y*, the tongue is approximated to the palate, the breath escaping centrally over the top. Fig. 5 represents *s*, *z*;* and Fig. 6, *p*, *ð*. In the first the breath escapes centrally, in the second laterally, as shown by the two dotted lines. Fig. 7 represents *r* (the English sound); Fig. 8, *f* and *v*, the labio-dentals, not the labials.

22. Fig. 2 may be made to represent *l* as well, by drawing two dotted lines to represent the breath issuing laterally past the tongue. Fig. 1 represents approximately the position of the tongue for *wh* and *w*; the lips are rounded for these (§ 24), but the tongue is also raised as for *k* and *g*, though not so far as to check the sound.

23. It will, I think, be seen from these figures how easy some of the changes in different languages are; for example, how simply Latin *d* may pass into either *r* or *l*; what small limits divide *s* and *th*; how easily an Englishman wishing to avoid the German *ch*, the position for which is nearly that for *y*, utters *sh* instead, which is intermediate between *s* and *th*. Many other changes are seen to be quite simple when you know the mechanism of speech. You may see how

* In Fig. 5 the tongue is wrongly represented as *touching* the teeth: it should touch the palate only, just behind the teeth.

impossible it is for you when you have a bad cold to say 'moon;' the voice cannot get through your nostrils, and therefore when the lips are opened *b* must come instead of *m*, and when the tongue is taken from the palate (as in Fig. 2) *d* comes, not *n*.

24. In producing vowels no friction or stoppage must occur; the voice has free play, but is modified by the different positions of the tongue, which is raised up towards the palate, but not so as to touch it, as it does in making the consonants. Following its motion from back to front, we get the following variations—the sounds heard in 'father,' 'pair,' 'pale,' 'pill,' 'peel,' that is the five vowels *a*, open *e*, close *e*, open *i*, and close *i*. In making these sounds the lips have nothing to do. But there is another row of vowels, for which the orifice of the lips is diminished or 'rounded,' by closing the ends more and more for each successive sound; for these the tongue is also raised, but further back in the mouth than for the first row; these are the sounds heard in 'Paul,' 'pole,' 'pull,' and 'pool,' or open *o*, close *o*, open *u*, and close *u*. You see how deficient we are in vowel-symbols; each of these nine sounds ought to have a distinct symbol in a good alphabet; and there are a good many intermediate sounds quite distinguishable to a practised ear.

25. I think that the position of the mouth for the vowels can be understood without much difficulty by referring to some of those for continuous consonants. Thus, for example, in sounding *i* (ee) the mouth is almost exactly in the position as for sounding *y* (Fig. 4), only the tongue is not raised so high as for *y*. There is free room for the voice to pass; but the difference is so slight that you can easily understand why *i* and *y* pass so readily into each other. The position for *u* (oo) is nearly the same as that for *k* and *g* (Fig. 1) except that the tongue is only brought near to the soft palate and does not touch it; hence the *g* before the *u* or *w* (see Ch. I., 33). The position of

the tongue for *a* (ah) is more constrained than for any other vowel: the back of the tongue is even lower than for *u*; hence the vowel is more corrupted than any other. It will also appear why *a*, *o*, and *u* are often weakened to *e* and *i*, but not *vice versâ*: *o* and *u* require a double action, the rounding of the lips as well as the raising of the tongue; whereas *e* and *i* are simple formations. It may be noted that, when the mouth is in the position for sounding close *e*, if the lips are then rounded, the result will be the German *ö* and French *eu*, a sound unknown in England; also if the lips are rounded when the mouth is in the position for *i*, German *ü* (French *u*) will be heard. This may serve as a practical direction to learners of these (to us) difficult sounds.

26. Speech, then, is the final and by far the most perfect instrument which man has for communication with his fellows. It is an acquirement of which he may well be proud. Indeed it is a common saying that **speech distinguishes man from brutes**. Yet articulated sound is within the reach of some animals. We allow that parrots can talk; but we say that they do not talk in order to convey any idea, but simply from love of imitation. I have heard of a parrot, which had learnt to say, 'Mr. A. is coming,' when he was seen on the road; but 'Mr. A. is come' when he entered the room. But it would be a mistake to suppose that the bird knew that it was conjugating a verb. If we allow that animals do possess all which can be claimed for man as his original possession—the capacity of producing modified sound—the power is still undeveloped. It is not by speech that animals communicate with each other. But they certainly do communicate, each animal in its own class, in some way as much unknown to us as our speech is to them. If then we remember that speech is essentially a means of communication, we shall conclude that the possession of speech by man, and

the want of it in the brute, does not prove that there is an insuperable barrier between the two; though that may be provable otherwise.

27. Reason and speech have seemed so inseparable to some that it has been maintained that man would not be man without speech. Hence Shelley's well known lines :—

“ He gave man speech, and *speech created thought*,
Which is the measure of the universe.”

This inquiry, whether speech preceded thought, or thought speech, is difficult, and it is not hard to bring forward plausible arguments on either side. The truth seems to be this. Speech creates thought in this sense; it is impossible for us to think except in some proposition, and a proposition presupposes connected words; a single name calls up but a vague conception in the mind which we do not clearly grasp ourselves and which we are quite unable to communicate to others. But though all this is certain, yet it does not follow that man first got words in order to think; he might get words for a different purpose and use them for this end afterwards; and this is probably the true account of the matter. The first object of speech was most likely the exchange of such rudimentary ideas as may be supposed to have existed in primitive man—ideas not reaching beyond food, shelter, and the getting of these. Such conceptions are far enough from deserving the name of the thought which measures the universe; but out of these thought may have been developed by the help of speech. But rudimentary thought preceded the most rudimentary speech.

28. This brings us to the long-disputed question, which always allures and always baffles our search. **What was the origin of language?** It will perhaps be said that man received it from his Maker. But the answer to this is plain and simple: we have no

warrant for supposing that man did so receive it ; and so far as we can see, it is not in accordance with the principles of the Divine government of the world, that man should be supernaturally provided with that which he is competent to produce.

29. It is of no use to make this inquiry in the sense of trying to find out some language first spoken by man upon the earth, before which none existed. We can point out how particular languages may have sprung up, because here we are guided by what we can see going on among uncivilized people at this day. Men tell us that in North America an Indian language does not last more than a generation ; the change of vocabulary is so rapid that a translation of the Bible may be totally unintelligible to the children of those for whom it was made. Change in Europe is not so rapid as this. But I have brought forward sufficient examples from our own language to show that change with us is quite perceptible ; and we can trace the formation of one language out of another, of the French out of the Latin for example ; and so we may learn what the processes are by which a language can grow up and pass away. But in all these cases there is some pre-existing material, out of which the new language is shaped—sounds already articulated. **For the inquiry how man began to utter articulate sounds at all, we have no data.** When science shall have determined what were the first beginnings of man upon the earth, the earliest form of all speech may be known also. In the meantime we may speculate ; only let us remember how weak is the basis for our results.

30. Man *may* at first have made himself understood by gesture only ; he *may* have also made rude representations, as with a stick upon the ground ; he *may* by degrees have learnt to help out his meaning by sounds, which he had all along the capacity to create. Children use their voice to

make sounds long before they connect any sort of meaning with them; by degrees they learn to make certain sounds at will, and to attach them to particular objects. But they have some guide; these sounds are attached to those things by the persons round about them. Had primitive man anything of the kind to help him? If savage *A* put his hand upon a bone that savage *B* was gnawing and gave a growl as a dog might do, it is probable that *B* would understand that *A* wanted the bone and meant to take it. If on the other hand *A* uttered the cry of pain, which is common to man and beast, it might be that *B* would perceive that *A* was asking for the bone as pathetically as he could. So by degrees *A* and *B* might attach meanings to these sounds apart from articles of food. All this *may* be so; and here we have enough to be the beginning of a language, a connection formed between a sound and an object or a process.

31. We do know, for here we have facts to go upon, that cries of pain, astonishment, pleasure, and the like, form a considerable part of the languages of savages; and that out of these a certain number have been retained in the speech of civilized nations, *e.g.* the Greek 'alalazo,' the Latin 'ululo,' &c. The languages of civilized peoples also show us upon analysis, that the terms for the most abstract conceptions can be traced back to the simplest. "The spirit does but mean the 'breath.'" 'Divinity' is traceable back to a word which was applied to the heaven and meant that which was 'bright.' Again, we know that savages almost universally denote birds and beasts by imitating their cry: this is so natural that many such names survive in every language: witness our 'cuckoo,' 'pewit,' and the like: and all things capable of producing sound, rivers, trees moved by the wind, all objects which give a certain ring when struck, would be easily and intelligibly denoted

In this manner, when once the idea of connecting sounds and things had become established. A great difficulty must have arisen when names were wanted for things apprehended only by sight or touch ; and it may have been long before this gap in speech was bridged over. So far as we can trace the history of names they generally, and indeed almost necessarily, describe some one property of the thing (compare Ch. IV., 16). Thus, one name for the sun was the 'burner,' for the moon the 'measurer,' for the stars the 'scatterers' apparently of light ; the oldest intoxicating drink of our forefathers had a name which survived, perhaps, latest in England (in the form 'mead') and meant something 'sweet ;' the name of wine shows that the drink was conceived of as that which was made out of that which grew on the tree which was 'tied up' (root 'vi' to bind) ; here, and often, the peculiarity seems to us quite accidental, and the name inappropriate. But none the less this fact may show us on what principle names were likely to be given.

32. We may suppose that the sound adopted by some man to express some one single feeling caused in him by an external object, might come to have a permanent connection for that man with that object, and might be to him truly its name. But it is not likely that other men would have the same name for it, though it might become current in a man's own family. Thus many different names would exist among the same people for the same thing ; till for some reason or other, convenience of sound, the play of fancy, real or supposed analogy, or something even more inscrutable, some one name would become current and the others would drop out of use. While men remained in a savage stage no such set of words would be likely to be permanent. Each family would form enough new terms, intelligible to themselves alone, to produce an entire change of language in one or two generations.

But a slight advance in civilization would give to some part at least of a language a greater permanence. Certain combinations of sound would become inseparably associated with certain ideas; and when some modification of the idea took place (*e.g.* when some new animal was found which was like some animal already known), the old sound would be taken as the basis of a new combination to express the new idea; and this process would be repeated till the sound would be the connecting link between many different ideas, the root, as we should call it, of a large family of words.

33. In this way then we may conceive of the beginnings of speech, guiding ourselves so far as we are able by the analogy of facts in existing languages. According to this view, **speech is the development, through imitation, of a capacity of man—the capacity of making a noise**, and it may be said that this view is as least as probable as any other. The facts mentioned are sufficient to show at least that **there is no necessary connection between the sound and the thing signified thereby**. In each case there is a reason for the sound; but (we may almost say) any other sound would have done as well, if it could have been accredited for the purpose. This reason cannot always be discovered; but we find it so clearly in many cases that we believe it to have existed in all. But if you try to settle offhand the connection between the meaning and the sound of a word, you will generally get into trouble. We are often tempted to think that the applicability of a word to its meaning is apparent in the sound; for example, that *groan* naturally expresses a deep sound, *scream*, a sharp one. But in such cases it is the idea which carries its associations into the sound quite as often as the sound expresses the idea. You may hear people say that the word *thunder* conveys the very sound of the roar in the

clouds. But the Old English form of the word, as we saw above, was *thunor*; which takes off some of the solemnity; though if, as is probable, the root was *stan*, there is indeed additional weight in the sound; but the old one is so unlike the new that no very special appropriateness seems to belong to either.

34. The first thing to be done with a word is to find out its history; not to speculate about its present form, but to trace it back to its earliest shape; and even then, to remember that it most likely had a still earlier history about which we can know nothing. Only in the case of the names of certain animals, or the words expressive of the cries they make (such as *mew*, *caw*, *bleat*, &c.) can we safely conclude that they were made to express particular sounds on the principle, as it is called, of 'onomatopoeia'—literally 'word-making,' but now restricted to forms of this one kind, where there is an obvious connection between the sound and the sense.

35. We see now that **language is the work of man, the product of man's mind and vocal organs**, as a statue or a picture is the product of his mind and hands. But language differs from these in some important respects. A picture is the work of one man, of a single will: **language needs the assent of many wills**. No one word, strictly speaking, is the work of a single will. I can make a certain sound at pleasure, and apply it to a certain use; I can say 'bo' instead of 'man,' if I please. But I have made no word; no one will understand me; and I should not expect the world to adopt my new term. A scientific man may invent a new name; but this must gain acceptance before it means anything except to him, and how many scientific terms die in their infancy! Those which endure are commonly names of new things, which are therefore needed by others as well as their inventor: and those have much the best chance of life which are descriptive in character,

such as *photograph*, *telegraph*. Arbitrary terms, even when appropriate, such as *daguerreotype*, are generally less permanent. **No one man of his own will can add one word to a language or take one away.** But one man can paint a picture, and it remains.

36. Again, a language differs from a picture in this way:—**it exists for an end**, it is an instrument as we have seen, by which a man makes himself understood. But a picture is an end in itself; a permanent product. The man in making it is not thinking of anything else for the time: it is to him the one important thing. But language is not important for itself: so long as the end, the being understood, is achieved, it is unimportant what form the language may take. Words may change, as we have seen that they do, so long as the change is not so violent as to make them unintelligible. And we have also seen that they change according to general principles against which the will of any one man is powerless. When ‘cabriolet’ was so shockingly mutilated, there were plenty of people who thought it vulgar to use the poor remnant of the word; but who now speaks of anything but a ‘cab?’ Borrowed words, as we have seen, gradually come under the English law of accentuation; against such mis-calling of some particular word an educated man will often protest, and adhere to the original pronunciation. We remember how the poet Rogers declared that it made him sick to hear the word ‘balcóny’ pronounced as ‘bálcony’ with the accent on the first syllable; but Rogers has passed away, and ‘bálcony’ survives. The general tendency prevails in spite of all individual exceptions.

37. I have tried to show you that this tendency acts in observable ways, prevailing over a whole language. Sounds which are disagreeable to a people are changed or dropped, or provided against somehow. It may happen that the same sound is not

always changed in the same language : sometimes it is retained in a particular group of words—arbitrarily, as it may appear ; yet the cause which keeps it there is not the will of any one man or even of many men ; rather it is the general sense that the sound is necessary for the meaning. At any moment, this may cease to be felt ; a few people may drop the sound, others may follow them ; and after a period of struggle, in which one man pronounces one way and one another, the innocent cause of the war either re-establishes itself or goes the way of its fellows. Thus it is uncertain now whether ‘contemporary’ will be finally pronounced with the *n*, or without it : at present even the same person may use both forms. In the same way ‘either’ varies between *eidhur* and *eedhur* (the spelling denotes the actual sounds heard) ; and it is doubtful whether it will go forward or backward : it will hardly get back to the older form *aidhur*. The general tendency in English in all such cases is toward the sound *ee* : and the general tendency will probably win in the long run. You may easily find other examples for yourself. These considerations may suffice to show that language is not an abiding work on which man consciously expends his labour : but that it varies according to general principles over which he has no direct control.

38. This brings me to the last point on which I wish to speak. The recognition of these general principles, which govern speech independently of the speaker, has not unnaturally led some philologists to the belief that the science of language should be classed among the physical sciences, rather than among those which deal with the works or the ways of man. In this view languages have been compared to plants, and described as natural organisms, which grow and die out in accordance with fixed laws, independent of the will of man. I cannot enter fully here

into this question : I will only submit one or two points for you to consider.

39. First, the analogy between language and a plant seems incomplete. We may fairly enough speak of the growth and decay of language ; meaning thereby the constant development of new forms, to meet the waste caused by the rubbing down of words in daily use or their falling out of use altogether. But the growth is not due to any inherent vitality in languages, as it is in plants : it is due to the action of man governed by laws of association—how established we cannot tell—between certain sounds and certain things. Just as we believe that in all history certain consequences necessarily follow certain antecedents ; and, if we could know all the antecedents in any one case, we could predict the result with certainty ; so in language, there are doubtless causes mental and spiritual, which determine the development of speech, but these also are hidden from our eyes. We must not eliminate the mind of man, as though it were no factor in the production of speech, because we cannot tell with certainty the laws by which it works.

40. Secondly, the death of a language cannot be exactly compared with the death of a plant. A plant dies a natural death when it is no longer capable of receiving from without those elements which are necessary for its growth. But that change in speech, which is so great that one language may be said to have died and a new one to be born, is due indeed to the progressive and never ceasing loss of old elements, but also to the addition of new ones : as when Latin became a 'dead' language, and the Romance languages grew up. When, on the other hand, a language 'dies out' because all those who speak it have ceased to exist, as the Keltic language in Cornwall, it may die in full vigour and able to perform every function. Such a superseding of one language by another of an entirely different character, is

altogether unlike the ordinary decay of a plant ; the language here suffers a violent death. These two considerations seem to me to point to this result : that, while language differs greatly from any ordinary work of human art, it also differs from any natural organism ; and the study of language must be classed neither as a historical nor as a physical science, but be placed between the two.

APPENDIX.

(1) **Grimm's Law** is the name given to a regular interchange of consonants between (i.) Indo-European, with which Sanskrit, Greek, and Latin in the main agree; (ii.) the Low German languages; (iii.) Old High German; but this language in its modern form often agrees with the Low German.

The interchange is shown in the following table, where the corresponding sounds are placed horizontally :—

Indo-European, &c.	Low German.	Old High German.
Aspirate.	Soft.	Hard.
Soft.	Hard.	Aspirate.
Hard.	Aspirate.	Soft.

By an aspirate is meant a momentary consonant followed by a slight *h*-sound, not so distinct as in 'backhouse,' 'ant/hill,' &c., but of the same nature. These sounds, however, are found only in Sanskrit and Greek; in the other languages they are represented by the corresponding continuous consonants—*h*, *ch* (German), *th*, *z*, *f*.

The following examples will shew the changes. Greek and Latin forms are given as being well known, instead of Indo-European. English represents Low German :—

	Greek.	Latin.	English.	Old High German.
<i>Aspirates.</i>	<i>khēn</i> <i>thēr</i> <i>phēgos</i>	<i>hanser</i> <i>fera</i> <i>fagus</i>	<i>goose</i> <i>deer</i> <i>beech</i>	<i>kans</i> (modern <i>gans</i>) <i>tior</i> (modern <i>thier</i>) <i>puoche</i> (modern <i>buche</i>)
<i>Softs.</i>	<i>genos</i> <i>duō</i> <i>kannabis</i>	<i>genus</i> <i>duō</i>	<i>kin</i> <i>two</i> <i>hemp</i>	<i>chunni</i> (modern <i>kind</i>) <i>zuei</i> (<i>zwei</i>) <i>hanf</i>
<i>Hards.</i>	<i>kardia</i> <i>tris</i> <i>pous</i>	<i>cor(d)</i> <i>tris</i> <i>pes</i>	<i>heart</i> <i>three</i> <i>foot</i>	<i>herza</i> (<i>herz</i>) <i>dri</i> (<i>drei</i>) <i>fuoz</i> (<i>fuss</i>)

Note that in Old High German the third change (soft for aspirate) took place only irregularly.

(2) Some of the more important letter-changes in Greek and Latin from the Indo-European. Among the vowels we often find that

(i) Indo-European *a* = Greek and Latin *e* or *o*; as Indo-European 'padas' = Greek 'podos' (gen. sing.) = 'podes' (nom. plur.) = Latin 'pedes' (nom. plur.).

(ii.) In Latin, *u* often = Greek *o* ('ferunt' = 'pheronti'); also *i* = Greek *o* ('pedis' = 'podos').

(iii.) In Greek *a* is sometimes weakened to *i*; thus 'hippos' = Indo-European 'akva'; 'didōmi' = Indo-European 'dadami.'

Among the consonants

(i.) In Latin *d* changes to *l*; 'Ulysses' = Greek 'Odysseus'; rarely to *r* as 'arbiter' = 'ad-biter' (the 'comer-to').

(ii.) In Greek *s* at the beginning of a word often

passes into *h*; so '*hus*' = Latin '*sus*'; between two vowels it is generally dropped, as in '*mūs*' (mouse) gen. '*mu(s)-os*.' In Latin *s* in the same place is generally changed to *r*, as '*mus*,' '*muris*.'

(iii.) In Greek *y* becomes *h*, as '*hū-meis*' = English '*you*,' or is lost altogether, thus '*dō-syō*' (future of *didōmi*) becomes in Attic '*dōsō*.' In Latin it is written as *i*, thus '*iug-um*' = English '*yoke*.'

(iv.) In Greek *v* becomes *h* ('*hesperos*' = Latin '*vesper*') or is dropped ('*ios*' = Latin '*virus*' = Indo-European '*visas*').

(v.) In Latin *f* = Greek *ph* and *th* (for exx. see App. 1). Initial *h* and sometimes *f* = Greek *kh* ('*hanser*' = '*khēn*'): '*fel*' = '*khole*' ('*gall*'). Medial *g* = Greek *kh* ('*angō*' = '*ankhō*'); medial *d* = Greek *th* (cp. '*aedes*' with Greek '*aithō*'); medial *b* = Greek *ph* ('*ambō*' = '*amphō*').

(vi.) Indo-European *k* sometimes changes to Greek *p* or *t*, Latin *qu*; '*kankan*' becomes Greek '*pente*,' Latin '*quinque*.'

(vii.) Indo-European *k* sometimes becomes *g* in Greek; '*arēgō*' = Latin '*arceo*'; *ky* and *ty* become *ss*; as in '*prassō*' for '*prak-yō*' (root '*prak*,' formative suffix '*yo*'), '*lissomai*' = '*lit-yo-mai*'; *gy* and *dy* become *z* (or = *dz*), as in '*stizo*' for '*stig-yo*,' cp. Latin '*stinguō*'; '*ozō*' = '*od-yō*,' cp. Latin '*odor*.'

(viii.) In Latin Indo-European *k* is written *c*, but sounded as *k*.

INDEX.

A.

Absolute construction, 111
 Accadian language, 46
 Accentuation, English law of, 47
 Accidence, 124
 Adjective, 124
 Adverbs, 116
against, 34
aimerai, 92
alembic, *almanac*, &c., 10, 80
 Alphabet, history of, 141
 Alruna, 141
 Amalgamating languages, 51
amatur, 98
 American languages, 46, 52
amongst, 34
 Analogy in language, 38
ancient, 34
 Antonumia, 123
 Aorist, 90
are, 64
arm, 70
 Arthron, 122, &c.
 Article, English, 64
 Articulation, indistinct, 32
 Aryan language, 55; its capabilities, 67
 Assimilation, 30
at, 63
 Augment, 86

B.

bar, 65
barefoot, &c., 77
 Base, 67
 Bases, composition of, 76
 Basque language, 46, 52
bear, 72
bishopric, 79

bittern, 20
bridegroom, 35
burg, 29
busk, 8
but, 6
-by, 65

C.

Case, ablative, 106; accusative, 99; dative, 102; genitive, 100; instrumental, 108; locative, 102; meaning of term, 113; noninative, 100; sociative, 109; vocative, 100
 Cases, confusion of, 110; freedom of use of, 112; in Finnish, 52; no definite number of, 110
chamber, 35
chamberlain, 8
Chester, 21, 27
childer, 16
 Chinese language, 46
combe, 6
 Compensation, 36
 Compounds and derivatives, 78
 Conjunctions, 119
convétable, 77
 Consonants, division of, 145
 Consonantal change, 24
convince, 9
corporal, 35
craig, 64
 Cuneiform writing, 134

D.

daisy, 77
data vasu, 127
daughter, 57
 Deaf mutes, 140

deed, 60
 Deponent verbs, 97
deni, 36
derive, 74
dis-, 40
 Dissimilation, 31
-dom, 79
doomsday, 77
dounai, 105
du, 27
dû, 26
 Dual, 110
duco, *dux*, 128

E.

Edda, 59
 English, provincial, 14, 25; relation to other languages, 60; vocabulary, 63
epepoithea, 91
 Epenthesis, 34
 Epirrhemata, 123
erit, 43
esseni, 93

F.

flash, 21
father, 67
feet, 18
fidicen, 76
fodder, 31
forage, 31
force, *fors*, *foss*, 64
ford, 64
fore-, 40
forego, 40
forswear, 40
forwhy, 109
 Frank language, 65
fume, 9

G.

Gadhelic, 57
gar, 21
garth, 64
 Gathas, the, 56
 Gender, 99
 German, its relation to English, 60
 Gesture language, 140
gill, 64
glen, 64
goose, 36
gospel, 76
 Gothic, 59

Grammar, its flexibility, 128; its vagueness, 130; nothing necessary in, 134
 Greek, 56
 Grimm's law, 162
guerre, 32
 Gutturals, weakening of, 27

H.

-head, 79
 Hieroglyphs, 142
 High-German, 59
hild, 88
-hood, 49
humble, 35

I.

Ideograms, 142
if, 120
 Infinitive, 105
 Interjection, 121
is, 64
it, 39

J.

jealous, 33
joke, 33

K.

kankan, 33
 Keltic, 57; pronunciation of, 21
kine, 16
 Kymric, 57

L.

Language, differs from natural organisms, 161; exists for an end, 158; not under man's control, 159; origin of, 152; work of man, 157
 Languages, agglutinative, 49; analytic, 45; Aryan, 55; incorporating, 46; Indo-European, 54; inflectional, 57; isolating, 47; monosyllabic, 47; synthetic, 45
 Latin, 56
lay, 72
lend, 34
lissouris, 12
 Lithuanian, 58
 Low-German, 59
-ly, 78

M.

mais, 6
maltster, 71
Manx, 57
mead, 67
men, 18
Metoché, 123
mis, 40
 Moods, 93; imperative, 94; indicative, 93; infinitive, 95; optative, 95; subjunctive, 94
mother, 67,
murder, 70

N.

nadder, 10
needs, 117
-ness, 49
newt, 10
nightingale, 35
Norse, 59; element in Cumberland, 42, 63
nostril, 76
 Noun, 115

O.

once, 117
Onoma, 121
Onomatopoeia, 157
orchard, 76
oss, 21

P.

Participle, 123
Parsi, 56
partridge, 35
passenger, 35
pastime, 11
paterfamilias, 77
pea, 39
Pehlevi, 56
pen, 64
 Perfect, strong, 37
pheasant, 34
 Philology, meaning of, 5; use of, 5
pilgrim, 32
 Places, names of, how affected, 41
 Plurals, English in *en*, 16; English verbs, 19; by vowel change, 17
pool, 64
 Predicate, 134
 Prepositions, 118
 Price, how expressed, 111

Pronoun, 123
 Pronunciation, dialectic differences, 21
 Prothesis, 123

R.

Race, Elements of English, 63
railroad, 79
receipt, 10
 Reduplication, 84, 88
 Reflexive verbs, Greek, 97; Icelandic, 98; Latin, 98
regere, 105
Rhema, 122
 Roots, 68, 73; pronominal, 75
 Runes, 141

S.

Sanskrit, 55; richness in consonants, 29
 Scandinavian, 59
schlecht, 7
 Slavonic, 58
scratch, 34
 Semitic languages, 54
sev (Turkish), 45
Shâhnameh, 56
sheriff, 76
ship, 75
singer, 71
sit, set, 72
slog, 70
son, 67
songster, songstress, 71
sound, 34
 Specialisation of words, 23
 Speech, clearness in, 137; connection with thought, 152; instrument of thought, 138; mechanism of, 144; parts of, 114
 Spelling, why arbitrary, 24
spinster, 69
 Stem, 69
 Subject in grammar, 134
 Suffix *-able, -ble*, 72
 -ant, 70
 -i, 71,
 -ine, 72
 -ing, 59, 71
 -ion, 72
 -ise, 39
 -ish, 71
 -ive, 72
 -kin, 69-71
 -ma; man; mat, 70
 -ock, 69-71
 -ship, 79

Suffix *-ster*, 71

-sya, 90

-tar, *-ter*, *-tor*, *-ther*, 70, 71

-tude, 72

-u, 71

-va, 71

-ya, *aya*, 71, 72

Suffixes, case, 81; formative, 68; inflectional, 68, 81, 99; middle, 97; primary and secondary, 69, 87; table of personal, 81

Syntax, antiquity of, 105

T.

tapster, 71

tayt, 12

Tenses, compound, 90; formation of, 84; future, 90; loss of, 90; special Greek and Latin, 91; Teutonic (perfect), 91

thimble, 35

thunder, 35, 156

thwaite, 64

till, 63

Time, how expressed, 111

tooth, 61

tor, 64

tree, 75

Trills, 28, 146

Turanian, 50

Turkish, 49

twice, 117

tydy, 13

tyrant, 54

U.

Ulfilas, 59

utor, 86, 129

V.

vat, 22

Vedas, 59

veilys, 11

Verb, 115; intensive, 85; transitive and intransitive, 126; voices of, 95

Vowel-augmentation, 85; binding, 89

Vowels, division of, 150

W.

warder, 9

warm, 70

wassail, 8

when (*cum*, *hōs*), 120

whiles, 117

whilst, 34

woman, 31

Words, borrowed in English, 80; identical in meaning, 9

work, 72

worth (verb), 12

Z.

Zend, 56

THE END.

SCIENCE PRIMERS.

UNDER THE JOINT EDITORSHIP OF

PROFESSORS HUXLEY, ROSCOE, AND
BALFOUR STEWART.

"They are wonderfully clear and lucid in their instruction, simple in style, and admirable in plan."—*Educational Times*.

The following are now ready :—

CHEMISTRY. By H. E. ROSCOE, F.R.S., Professor of Chemistry in Owens College, Manchester. 28mo. Illustrated. 1s. With Questions.

PHYSICS. By BALFOUR STEWART, F.R.S., Professor of Natural Philosophy in Owens College, Manchester. 18mo. Illustrated. 1s. With Questions.

PHYSICAL GEOGRAPHY. By A. GEIKIE, F.R.S., Murchison Professor of Geology and Mineralogy at Edinburgh. 18mo. Illustrated. 1s. With Questions.

GEOLOGY. By Professor GEIKIE, F.R.S. With numerous Illustrations. 18mo. 1s.

PHYSIOLOGY. By MICHAEL FOSTER, M.D., F.R.S. With numerous Illustrations. 18mo. 1s.

ASTRONOMY. By J. NORMAN LOCKYER, F.R.S. With numerous Illustrations. 18mo. 1s.

BOTANY. By Sir J. D. HOOKER, K.C.S.I., C.B., President of the Royal Society. Illustrated. 18mo. 1s.

LOGIC. By Professor STANLEY JEVONS, F.R.S. 18mo. 1s.

POLITICAL ECONOMY. By Professor JEVONS. F.R.S. 18mo. 1s.

INTRODUCTORY. By Prof. HUXLEY, F.R.S.
[Preparing with others.]

MACMILLAN AND CO., LONDON.

HISTORY AND LITERATURE PRIMERS.

Edited by JOHN RICHARD GREEN,
Author of "A Short History of the English People."

ENGLISH GRAMMAR EXERCISES. By R. MORRIS, LL.D., and H. C. BOWEN. 1s.

ENGLISH GRAMMAR. By R. MORRIS, LL.D. 18mo. 1s.

HISTORY OF ROME. By M. CREIGHTON, M.A. With Maps. 18mo. 1s.

HISTORY OF GREECE. By C. A. FYFFE, M.A. With Maps. 18mo. 1s.

ENGLISH LITERATURE. By the Rev. STOPFORD BROOKE, M.A. 18mo. 1s.

HISTORY OF EUROPE. By E. A. FREEMAN, D.C.L., LL.D. With Maps. 18mo. 1s.

GREEK ANTIQUITIES. By J. P. MAHAFFY, M.A. Illustrated. 18mo. 1s.

ROMAN ANTIQUITIES. By Prof. A. S. WILKINS, Illustrated. 18mo. 1s.

CLASSICAL GEOGRAPHY. By H. F. TOZER, M.A. 18mo. 1s.

GEOGRAPHY. By GEORGE GROVE, F.R.G.S. With Maps. 18mo. 1s.

CHILDREN'S TREASURY OF LYRICAL POETRY. By F. T. PALGRAVE. In Two Parts. 1s. each.

SHAKSPERE. By Prof. DOWDEN. 18mo. 1s.

PHILOLOGY. By J. PEILE, M.A. 18mo. 1s.

GREEK LITERATURE. By Prof. JEBB, M.A. 18mo. 1s.

OTHERS TO FOLLOW

PRIMER OF PIANOFORTE PLAYING. By FRANKLIN TAYLOR. Edited by GEORGE GROVE. 18mo. 1s.

MACMILLAN AND CO., LONDON.

**University of Toronto
Library**

**DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET**

**Acme Library Card Pocket
Under Pat. "Ref. Index File"
Made by LIBRARY BUREAU**

